CITY OF OAKDALE

BICYCLE AND PEDESTRIAN MASTER PLAN

ADOPTED BY THE CITY COUNCIL
OCTOBER 1, 2001
RESOLUTION 2001-133

PREPARED FOR THE CITY OF OAKDALE
BY FEHR & PEERS ASSOCIATES, INC.
AND THE OAKDALE TRAILS ADVISORY COMMITTEE

ACKOWLEDGEMENTS

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I. INTRODUCTION

The Oakdale Bikeway and Trails Master Plan (BTMP) was prepared by Fehr & Peers Associates, Inc. under contract with the City of Oakdale Community Development Department with assistance and guidance from the Oakdale Trails Advisory Committee (OTAC). The purpose of this document is to provide a blueprint for developing a bikeway and trails system that includes both on-street and off-street facilities as well as support facilities and safety education programs within the City of Oakdale. This report contains background information about how the plan was developed, and focuses on the development of the proposed bikeway and trail system with specific consideration given to advancing individual facilities from the planning stage to construction.

STUDY AREA

The study area includes the City of Oakdale and areas directly adjacent to the City, which is located in Stanislaus County (refer to Figure 1). Most of the study area can be characterized as having level terrain with limited areas of rolling terrain along the Stanislaus River. Population and employment centers are evenly dispersed within the City limits while areas adjacent to the City consist primarily of agricultural uses.

PLANNING AND DESIGN STANDARDS

Bikeway planning and design in California typically rely on the guidelines and design standards established by the California Department of Transportation (Caltrans) as documented in the "Chapter 1000: Bikeway Planning and Design" contained in the Highway Design Manual, Fifth Edition, California Department of Transportation, January, 2001. This chapter of the design manual was the basis for standards of the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA). Chapter 1000 identifies specific design standards for various conditions and the relationship of bikeways to roadways. The Caltrans standards provide for three distinct types of bikeway facilities as generally described below and shown in Figure 2.

- Class I Bikeway (Bike Path) - Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross-flow minimized.
- Class II Bikeway (Bike Lane) - Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway (Bike Route) - Provides for shared use with pedestrian or motor vehicle traffic.

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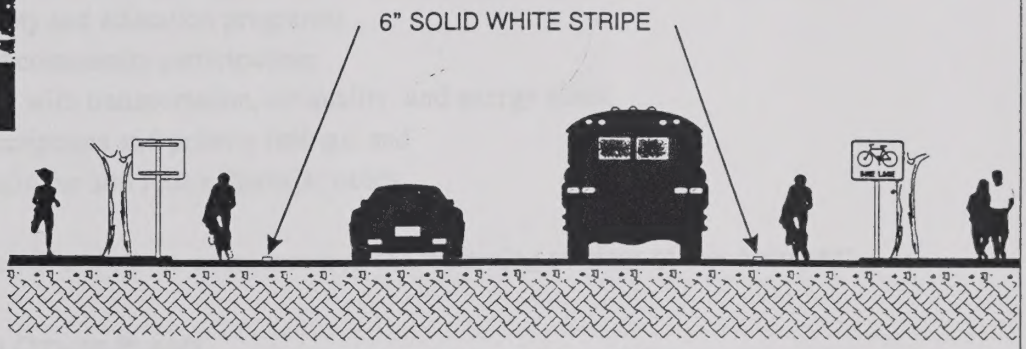
City of Oakdale Bikeway and Trail Master Plan
STUDY AREA
FIGURE 1

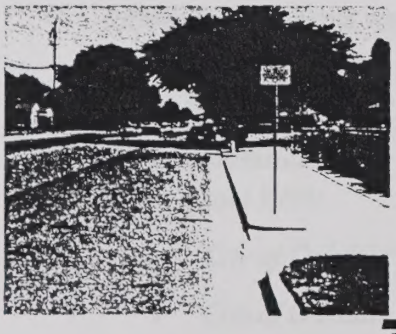
CLASS I BIKEWAY (Bike Path)

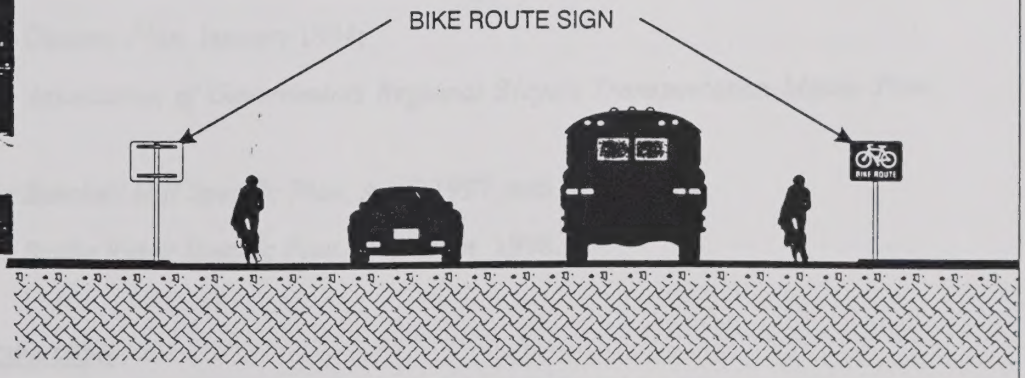
Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with crossflow minimized.



CLASS II BIKEWAY (Bike Lane)

Provides a striped lane for one-way bike travel on a street or highway.





CLASS III BIKEWAY (Bike Route)

Provides for shared use with pedestrian or motor vehicle traffic.

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City of Oakdale Bikeway and Trail Master Plan
GENERAL BIKEWAY CLASSIFICATION

FIGURE 2

Other important policy, regulatory, or legislative documents that affect bikeway and pedestrian planning and design include the California Streets and Highways Code and Vehicle Code, the California Bicycle Transportation Act (1994), Nevada Revised Statues (1999) Chapters 408, 484, and 486. The California Bicycle Transportation Act (1994) recodifies the Streets and Highways Code (Chapter 517) and requires Caltrans to take certain actions that further promote bicycle programs. A key component of this act is the requirement for cities and counties to complete bikeway master plans containing the following eleven elements as a condition of applying for state funding through the Bicycle Transportation Act:

1. Estimated number of existing and future bicycle commuters;
2. Land use and population density;
3. Existing and proposed bikeways;
4. Existing and proposed bicycle parking facilities;
5. Existing and proposed multi-modal connections;
6. Existing and proposed facilities for changing and storing clothes and equipment;
7. Bicycle safety and education programs;
8. Citizen and community participation;
9. Consistency with transportation, air quality, and energy plans;
10. Project descriptions and priority listings; and
11. Past expenditures and future financial needs.

This plan addresses each of the eleven components in the remaining sections of this document.

Consistency With Other Plans

Preparation of this plan included a review of applicable documents to ensure consistency. The following documents were reviewed:

- *City of Oakdale General Plan*, January 1994;
- *Stanislaus Area Association of Governments Regional Bicycle Transportation Master Plan*, July 1996;
- *City of Oakdale Burchell Hill Specific Plan*, April 1997; and
- *City of Oakdale Bridle Ridge Specific Plan*, December 1998.

Community Participation

Community participation was an important component of this plan update in obtaining input on existing bicycling and walking conditions, potential roadways for improvement to accommodate bicycling and walking, and the type of support facilities or programs needed to improve bicycling and walking in the community. The community participation effort included input from the public at a Town Hall Meeting and workshop held on June 7, 2001 at the Gene Bianchi Community Center in Oakdale. In addition, OTAC members submitted maps of the proposed system to students in the

3rd to 6th grades at local elementary schools for their input. Student input was reviewed at the Town Hall Meeting and used in the development of this plan. Key adult and student comments considered in the development of the BTMP are summarized below.

ADULT COMMENTS:

GENERAL

1.1 More Class I facilities
1.2 Want a perimeter trail

CONNECTIVITY

2. 1 Connect to other communities
2. 2 Link to Kerr Park
2. 3 Connect to areas east of City
2. 4 Provide smooth transition from segment to segment
2. 5 Provide better connection to/from older part of City

CONSTRAINTS

3. 1 Stay off Highways
3. 2 Avoid development on north side of river
3. 3 East A Street has heavy auto traffic, suggest using D Street
3. 4 Post Road seems narrow and in need of repair. It has heavy traffic due to industrial area.
3. 5 Provide a better intersection Class I bike path along PG&E corridor at Highway 108

SAFETY

4.1 Safer connection from NW quadrant of City to TL Davis Park
4.2 Put school bike racks away from vehicular traffic
4.3 Put ramps from bike racks to street with a barricade partly into the street for safety

ACCESS

5. 1 Provide grade separated crossings at Highways and Railroad
5. 2 River Oaks subdivision linkage to the river between specific lots
5. 3 Provide river crossing at River Avenue Park
5. 4 Would like Valley View Park access
5. 5 Move proposed Class III bike route from Willow Glen to Willow Wood and cross at the proposed signal on Highway 108.

NEW ROUTES/FACILITIES

6.1 Provide a river trail
6.2 Provide Class III bike route loop around Magnolia School
6.3 Provide Class II bike lane south of J Street on 5th Avenue to Sierra Avenue, Sierra Avenue to Post Road

6.4 Provide Class I bike path north of Highway 108 from PG&E easement to Plaza De Oro Drive

6.5 Extend proposed Class I bike path (Cottle Trail) north of the river to Rodden Road.

6.6 Extend proposed Class I bike path from Kerr Park to Corps of Engineers Park

6.7 Provide connection to Magnolia School from Walnut Street via Lambuth Avenue.

6.8 Provide Class I bike path along back of development, south of the gun range

6.9 Bike rack at Cloverland School

STUDENT COMMENTS:

GENERAL

1.1 Want a perimeter trail

1.2 More sidewalks

1.3 More crosswalks

CONNECTIVITY

2. 1 Provide connections to schools and parks

2. 2 All schools connected with Class II bike lanes

2. 3 Provide connections to other communities

2. 4 Provide connections to recreation centers

2. 5 Provide a loop around the junior high school

2. 6 Provide connections to shopping centers

2. 7 Provide connections to fast food restaurants

2. 8 Provide connections to library and post office

2. 9 Provide connection to the Catholic Church

CONSTRAINTS

3. 1 No Comments

SAFETY

4.1 Provide a safe crossing at Highway 120

ACCESS

5.1 No Comments

NEW ROUTES/FACILITIES

6.1 Provide a link from river trail to Pioneer

6.2 Provide Class I bike path along river from Highway 120 to Orange Blossom

6.3 Provide Class II bike lane on Highway 108 between Willow Glen Avenue and Oak Street

6.4 Provide Class II from Fish Park to Fair Oaks Elementary School

6.5 Provide Class II along Highway 108 between Crane Road and Maag Avenue

6.6 Provide a link between Walnut Street and Highway 108
6.7 Provide a link along Walnut Street form Brichetto Property to Fair Oaks Park
6.8 Provide a link from River Avenue to Don's Mobile Glass
6.9 Provide a link from Lon Dale Road to the City
6.10 Provide a link from viewpoint to Fish Park
6.11 Provide a link along Wood Avenue to K-Mart
6.12 Provide a link along Lambuth Avenue to the Game Exchange on Highway 108
6.13 Provide a link along Arboles Way from G Street to J Street
6.14 Provide a link along Ventanas Avenue from G Street to J Street
6.15 Provide a link along Pedersen Street from H Street to J Street
6.16 Provide a link along H Street from 6th Street to Pedersen Street
6.17 Provide a link along Buccaneer Way from J Street to Wagon Wheel Ct.
6.18 Provide a link along Cliffwood Drive from Pontiac Avenue to Naturewood Drive
6.19 Provide a link from Pontiac Avenue to Liberini Street
6.20 Provide a link along Pleasanton Place from Oak Street to Fair Oaks Elementary School
6.21 Provide a link along Lee Avenue from Pontiac Avenue to Valmor Court
6.22 Provide a link along Wood Avenue from F Street to G Street
6.23 Provide a link along Bryan Avenue from F Street to G Street
6.24 Provide a link along Gilbert Avenue from G Street to J Street
6.25 Provide a link along Hinckley Avenue from G Street to J Street
6.26 Provide a link along Ash Avenue from F Street to J Street
6.27 Provide a link along H Street from Ash Street to Oak Street
6.28 Provide a link along I Street from Oak Street to Wood Avenue
6.29 Provide a link along 2nd Street from A Street to C Street
6.30 Provide a link along B Street from 2nd Street to Highway 120
6.31 Provide a link along C Street from 2nd Street to Highway 120
6.32 Provide a link along C Street from Cloverland Avenue to Valley View Drive
6.33 Provide a link along E Street from 6th Street to Johnson Avenue
6.34 Provide a link along Maxwell Street from Poplar Avenue to Highway 108
6.35 Provide a link along 8th Street from C Street to D Street
6.36 Provide a link along Johnson Avenue from C Street to F Street

The comments included above were reviewed by the OTAC and incorporated into this plan where deemed appropriate. The majority of these concerns and requests are addressed in this plan. Student comments 2.5 and 6.14 identified a need for a link on Ventanas Avenue between G Street and J Street, which completes a loop around the junior high school. The OTAC intends to implement a Class II facility on this link based upon these comments and incorporate the involvement of local students in the development of the plan.

Organization of the Plan

The remainder of this document includes the following sections:

- II. Goals, Objectives, and Policies;
- III. Existing Conditions;
- IV. Analysis of Demand;
- V. Proposed System;
- VI. Cost and Funding Analysis; and
- VII. Implementation.

The information presented for each of these components is the result of the data collection efforts of City of Oakdale staff and the consultant. The components have been organized to provide the reader with a logical discussion of how this plan was prepared, which began with the development of bikeway and pedestrian goals and policies to direct the planning effort.

II. GOALS, OBJECTIVES, AND POLICIES

The development of goals, objectives, and policies for this plan are intended to provide specific direction on the necessary actions involved in planning, designing, funding, and constructing bikeway facilities. The following information relies on an understanding of the relationship between the proposed bikeway system, key issues facing implementation of specific routes, and the requirements of local, state, and federal funding programs. Many communities have found it useful to organize the goals and policies by topic areas that relate to specific implementation issues. For Oakdale, these topic areas include:

- Overall System;
- Land Development;
- Commuting;
- Safety Education;
- Environmental Considerations; and
- Funding.

The purpose of organizing this section by topic area is to provide City staff, decision makers, and citizens with clear and concise policy direction on how to implement the bikeway facilities proposed in this plan. Each topic area addressed below includes an overall goal, measurable objective, and policies with specific action statements related to the development of specific facilities or programs within the City of Oakdale. Information on proposed goals and policies was also taken from the various plans and studies reviewed for this project. A summary of goals, objectives, and policies from these sources is included as Appendix A of this plan and incorporated where necessary into the following topic areas.

OVERALL SYSTEM

The following goal and policy statements express the philosophy behind this plan and the proposed system. The statements stem from the City's desire to provide residents and visitors with a connected bikeway/trail system that can accommodate both commute and recreational trips throughout the City.

GOAL 1: **PROVIDE A WELL-CONNECTED BIKEWAY SYSTEM WITHIN THE CITY OF OAKDALE TO IMPROVE THE QUALITY OF LIFE FOR ALL RESIDENTS AND VISITORS.**

OBJECTIVE: Construct priority bikeways identified in the proposed system and provide for the maintenance of both existing and new facilities.

GOAL 2: **PROMOTE SAFE, CONVENIENT, AND ENJOYABLE CYCLING BY ESTABLISHING A COMPREHENSIVE SYSTEM OF BIKEWAYS THAT LINK THE CITY OF OAKDALE TO OTHER STANISLAUS COUNTY COMMUNITIES.**

OBJECTIVE: Coordinate with Stanislaus County departments, cities, and other government entities to create continuity and consistency with existing and planned bikeway systems.

POLICIES

1.1 Prepare and maintain a BTMP that identifies existing and future needs, and provides specific recommendations for facilities and programs including adequate provisions for bicycle and pedestrian use to, within, and from the City of Oakdale.

1.2 Create a bikeway system that is cost effective to construct and maintain and minimizes the potential for conflicts with other vehicles, pedestrians, and users.

1.3 Require all bikeways to conform to design standards contained in the latest version of the Highway Design Manual, Chapter 1000: Bikeway Planning and Design, Caltrans, unless otherwise established by the City.

1.4 Consider a proposed route's importance in providing access and connectivity to adjacent bikeway facilities and destinations when recommending bike routes for implementation.

1.5 Coordinate with Stanislaus County, City of Riverbank, and City of Escalon regarding the implementation of the proposed system.

1.6 Provide bicycle connections that allow for regional bicycle travel to and from the City of Oakdale.

1.7 Integrate bicycle planning with other community planning, including land use and transportation planning.

1.8 As funding allows, implement the proposed bikeway system.

LAND DEVELOPMENT

As new construction or re-construction of City facilities occur, individual projects should be reviewed to ensure consistency with the proposed system. In addition, development projects should adhere to the policy statements below regarding access, mobility, and support facilities for bicyclists and pedestrians.

GOAL 3: **INCLUDE BIKEWAY FACILITIES IN ALL APPROPRIATE CITY DEVELOPMENT PROJECTS TO FACILITATE ON-SITE CIRCULATION FOR BICYCLE AND PEDESTRIAN TRAVEL, ON-SITE BICYCLE PARKING, AND CONNECTIONS TO THE PROPOSED SYSTEM.**

OBJECTIVE: Maximize the number of daily trips made by bicycling to and from new development projects within the City of Oakdale.

POLICIES

3.1 Ensure consistency with the City of Oakdale General Plan when planning and acquiring bikeway easements.

3.2 Meet the requirements of the Americans with Disabilities Act when constructing facilities contained in the proposed system, where applicable.

3.3 Provide pedestrian/bicycle crossings at appropriate intervals along new roadways that will adequately serve new large-scale commercial, office, industrial, and residential development.

3.4 Adhere to specific policies contained within adopted plans and specific plans relating to the design, implementation, and function of bikeways and pedestrian facilities within the City of Oakdale.

COMMUTING

Bicyclists can represent a larger percentage of total commute trips if a comprehensive network of interconnected bikeway facilities is developed. This plan proposes to implement such a system as defined by the following goal and policy statements.

GOAL 4: **DEVELOP A BIKEWAY SYSTEM THAT ENHANCES SAFETY AND CONVENIENCE OF BICYCLING TO AND WITHIN THE CITY OF OAKDALE.**

OBJECTIVE: Increase bicycle trips to work to reduce vehicle congestion, improve air quality, conserve energy use, and improve individual physical fitness.

POLICIES

4.1 Maintain access from the proposed system to residential and commercial centers.

4.2 Provide and/or maintain support facilities such as bicycle racks, personal lockers, and showers at appropriate locations to promote bicycle use.

4.3 Encourage employees to consider bicycling as an alternative mode for commuting to and from employment centers.

4.4 Coordinate with local transit providers to allow bicycle transport on buses.

SAFETY EDUCATION

Safety education is an important aspect of increasing bicycle use. If bicyclists or potential bicyclists perceive that the bikeway system is unsafe, they will be discouraged from using it. Therefore, the following goal and policy statements are intended to improve the users knowledge of how to use the bikeway system safely.

GOAL 5: MAINTAIN AN UPDATED SYSTEM MAP AND EDUCATIONAL BROCHURES TO INFORM THE PUBLIC WHERE AND HOW TO RIDE BICYCLES WITHIN THE CITY.

OBJECTIVE: Improve bicycle safety in the City of Oakdale by providing a system of connected routes that minimize conflicts with autos and pedestrians.

POLICIES

5.1 Incorporate standard signing and traffic controls as established by Caltrans to ensure a high level of safety for the bicyclist, pedestrian, and motorist.

5.2 Use available accident data to monitor bicycle-related accident levels annually and target a 25 percent reduction over the next ten years.

ENVIRONMENTAL CONSIDERATIONS

Bikeway facilities are generally considered to benefit the environment because their use reduces demand for motorized travel and promotes beneficial life style changes. Nevertheless, the construction of specific facilities may adversely affect the physical environment. The following goal and policy statements have been developed to avoid and minimize potential impacts to the environment.

GOAL 6: AVOID ADVERSE ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE IMPLEMENTATION OF THE PROPOSED SYSTEM.

OBJECTIVE: Mitigate potentially significant impacts to a level of less than significant whenever possible.

POLICIES

6.1 Conduct site-specific environmental review consistent with the California Environmental Quality Act for individual bicycle projects as they advance to the implementation stage of development.

6.2 Solicit and consider community input in the design and location of bikeway facilities that connect to neighborhoods.

6.3 Consider the effect on other transportation facilities such as travel lane widths, turn lanes, on-street parking, and on-site circulation when planning and designing on-street bikeways.

FUNDING

To obtain the funding required to implement the proposed system, the City of Oakdale must take advantage of funding sources at the state and federal level. It will also require a commitment of local funding.

GOAL 7: ACQUIRE SUFFICIENT FUNDING TO CONSTRUCT THE PROPOSED SYSTEM WITHIN THE NEXT TWENTY YEARS.

OBJECTIVE: Maximize the amount of local, state, and federal funding sources for bikeway facilities that can be used by the City of Oakdale for the implementation of the proposed system.

POLICIES

7.1 Periodically update current information regarding regional, state, and federal funding programs for bikeway facilities along with specific funding requirements and deadlines.

7.2 Where feasible, consider joint grant applications with other agencies, such as the City of Riverbank, the City of Escalon, and/or Stanislaus County, for state and federal funds.

7.3 Submit completed funding applications.

III. EXISTING CONDITIONS

This summary of existing conditions describes the current status of bikeway and pedestrian facilities in the City. The discussion focuses on existing facilities, regional and multi-modal connections, and support facilities and programs.

EXISTING BIKEWAY FACILITIES

Figure 3 displays the existing bikeway facilities within the City of Oakdale based on facility inventories and available information included in the General Plan, adopted specific plans, and the county-wide bicycle master plan. The current system has limited facilities evenly dispersed throughout the community. However, as part of the development of this plan the OTAC and City of Oakdale City Council identified and approved the implementation of priority segments to be constructed during the BTMP development process prior to adoption. The following list represents segments approved and implemented during plan development:

- Class II on G Street – 6th Street to Maag Avenue
- Class III on D Street – 6th Street to Maag Avenue
- Class III on Walnut Street – Oak Street to First Avenue
- Class III on Oak Street – Walnut Street to Poplar Street
- Class II on 6th Street – A Street to D Street
- Class II on 6th Street – G Street to J Street

REGIONAL AND MULTI-MODAL CONNECTIONS

To encourage bicycling and walking, the BTMP should contain connections to all of the surrounding communities and it should contain connections to other forms of travel such as public transit at transfer locations. The extent of existing regional and multi-modal connections is discussed below.

REGIONAL CONNECTIONS

Some regional bicycle travel occurs between communities such as Riverbank, Escalon, and Modesto. State Routes (SR) 108 and 120 provide direct access to Oakdale from neighboring communities.

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City of Oakdale Bikeway and Trail Master Plan
EXISTING BICYCLE ROUTE SYSTEM

FIGURE 3

Table 3

Bicycle and Pedestrian Safety Education Program Summary

Agency	Contact Person	Programs Offered
Oakdale Police Department	Lt. Lester Jenkins (209) 847-2231	Community Bicycle Rodeos (1/year) School-Based Bicycle Rodeos (3/year) - Skills Instruction - Free Equipment Inspection - Helmet Program Traffic Safety Presentations (6/year)

As indicated in the table, the Oakdale Police Department is actively involved with student education through bicycle rodeos or other events. These events are particularly useful in demonstrating how to bicyclists and pedestrians are to use the roadway system safely.

IV. ANALYSIS OF DEMAND

The objective of analyzing bicycle and pedestrian travel demand is to identify the following travel characteristics:

- Level of existing bicycle and pedestrian trips;
- Patterns of travel for bicycle and pedestrian trips;
- Level of future bicycle and pedestrian trips; and
- Possible methods of stimulating additional bicycle and pedestrian trips.

This section identifies the location of existing major activity centers likely to attract bicycle and pedestrian trips, and provides information about population and employment trends and their influence on bicycle and pedestrian travel demand.

EXISTING MAJOR ACTIVITY CENTERS

One purpose of the BTMP is to provide improved linkages from residential areas to employment, commercial, educational, and recreational centers. These linkages support bicycle and pedestrian travel demand for both commuter and recreational trip purposes. Major activity centers in the City of Oakdale were mapped and include regional commercial areas, large residential developments, employment and educational centers, schools, and parks (refer to Figure 1). Most of these centers are located along or near a State highway or major arterial.

POPULATION AND EMPLOYMENT TRENDS

The following discussion contains estimates of existing and forecasts of future, population and employment levels to determine trends and how they affect demand for bikeway and pedestrian facilities.

EXISTING POPULATION

The 2000 Census population data from the Department of Finance (DOF) showed Oakdale's population increased from 12,000 persons in 1990 to 15,500 in 2000. This represents approximately a 30 percent increase in 10 years. Stanislaus County as a whole experienced a 21 percent increase in population from 370,500 in 1990 to 447,000 in 2000. Table 4 shows the breakdown of population estimates for the incorporated areas of the County.

Table 4 Stanislaus County Population Estimates			
Jurisdiction	1990 Population	2000 Population	Percent Change
Stanislaus County	370,522	446,997	20.6%
Oakdale	**11,961**	**15,503**	**29.6%**
Ceres	26,314	34,609	31.5%
Hughson City	3,259	3,980	22.1%
Modesto City	164,730	188,856	14.6%
Newman City	4,151	7,093	70.9%
Patterson City	8,626	11,606	34.5%
Riverbank City	8,547	15,826	85.2%
Turlock City	42,198	55,810	32.3%
Waterford City	4,771	6,924	45.1%
Source: Department of Finance 2000 Census Data			

As shown in Table 4, most of region has experienced significant population growth over the past decade. As a result of development pressures from the San Francisco Bay area, the growing population trend is expected to continue.

FUTURE POPULATION AND EMPLOYMENT

Based on the 2000 Census data, the resident population of Oakdale has increased by approximately 3,500 over the past 10 years. This represents an average growth rate of approximately 2.6 percent per year. Over the next 10 years, the resident population would approach 20,000 people if this trend continues. Another important consideration is the summer visitor population. The Yosemite National Park is a major recreational attraction, especially during the summer. This increase in visitor population contributes substantially to travel demand during peak summer months.

The City's current employment figures, based on the DOF County profiles, is approximately 6,000 workers, with over half of this amount employed by the Cities largest employers. Employment increases in the next decade depend on increases in the resident population, and the possibility of new employers relocating to the area. It is anticipated that this growth will be balanced largely by the physical carrying capacity of the area.

Future growth and changes in population and employment are important to bikeway and pedestrian planning for two reasons. First, new developments often require upgrades to existing roadways, which may create an opportunity to construct new bikeway and pedestrian facilities. Second, changes in land use patterns that provide for better access and connectivity can make bicycling or walking more convenient.

Bicycle and Pedestrian Travel Demand

Bicycle and pedestrian trips are not easily measured or projected for an entire region without extensive data collection efforts. Existing and available data is currently limited to the 1990 Census data. With this limited amount of information, the following discussion describes both existing and future bicycle and pedestrian trips and their relationship to the future development of a comprehensive bikeway and pedestrian system.

Existing Demand

A common term used in describing demand for bicycle facilities is "mode split." Mode split refers to the form of transportation a person chooses to take, be that walking, bicycling, using public transit, or driving. Mode split is often used in evaluating commuter alternatives such as bicycling, where the objective is to increase the "split" or percentage of people selecting an alternative means of transportation. From the 1990 Census, mode split information is available for the journey-to-work. This information is presented in Table 5 for Stanislaus County and its incorporated cities.

Table 5
Bicycle Commuting in Stanislaus County (1990 Census)

Jurisdiction	Percent of Work Trips
Oakdale	0.87%
Hughson	0.40%
Ceres	0.30%
Newman	1.71%
Modesto	0.88%
Patterson	0.54%
Riverbank	0.30%
Turlock	1.30%
Waterford	0.00%
Unincorporated Area	0.79%
Total	0.85%

1990 Census Journey-to-Work (all workers who did not work at home).

As shown in Table 5, bicycle and pedestrian trips represent only a fraction of home-based work trips for Oakdale and other County residents. This small percentage is due in part to the rural nature of the County and the lack of a well-connected bikeway system in Oakdale and other neighboring cities.

The above data does not contain home-to-school trips that occur during the same morning peak hours as typical commuter trips. Since many children walk or ride bicycles to school, the actual number of bicycle and pedestrian trips during the morning peak hour associated with commuters is probably higher.

FUTURE DEMAND

Future bicycle and pedestrian trips will depend on a number of factors such as demographics, the availability of well-connected facilities, and the location, density, and type of future land development. Based on projections in the Stanislaus Area Association of Governments (STANCOG) Regional Bicycle Transportation Master Plan (RBTMP) update, as bike lanes, bike paths and other bicycle improvements are constructed in the County, the proportion of trips made by bicycle can be expected to increase. STANCOG estimates that with full implementation of the priority facilities in the RBTMP, bicycle use can be expected to double. Given this assumption, bicycle commuting would increase to about 4,800 trips per day for the County by 2015, and to 32,000 for all bicycle trips during the same time frame.

According to STANCOG and the 1990 Census information, approximately 4,600 total daily commute trips were made in the City of Oakdale. The bike mode split of 0.87 percent results in about 40 commute trips by bicycle. Even if the existing mode split does not change, projected increases in population will result in additional commute trips and ultimately additional bicycle and pedestrian commute trips to/from work. A doubling of the 1990 Census mode split would result in 80 to 100 bike commute trips daily in Oakdale. *The National Bicycling and Walking Study: Transportation Choices for a Changing America,* Federal Highway Administration, 1994, indicates a much larger increase could occur if more bicycle and pedestrian friendly transportation systems are constructed. For communities with a comprehensive bikeway and pedestrian system (such as the one presented in the next section) and a complimentary land use pattern, mode splits for bicycle and pedestrian trips can range from 10 to 20 percent.

V. PROPOSED SYSTEM

This section describes the proposed bikeway and pedestrian system for the City. This system was developed based on previous planning efforts and direct input from the public and interested agencies and groups. Key criterion used in developing and refining the proposed system is listed below.

- Advocacy Planning - Rely on members of interested agencies, organizations, City Staff, and community in the plan development process.
- Public Input - Consider public information in the bikeway and pedestrian planning process.
- Use - Bikeway and pedestrian facilities contained in the proposed system should reflect use levels that are commensurate with the level of investment required for construction and maintenance.
- Coverage - The system should provide balanced access from all portions of the region's population centers for both commuting and recreation routes.
- Safety - The system should provide the highest level of safety possible while eliminating major safety concerns such as narrow roadways.
- Connectivity - The system should provide connections to major activity centers, multi-modal transfer locations, and to routes that provide access to neighboring counties. Activity centers include residential neighborhoods, schools, regional parks, shopping centers, employment centers, government centers, transit centers, and other recreational opportunities. Major gaps and barriers, including narrow bridges and roadways, should be targeted as high priority items.
- On-Street Bikeways - Class II bike lanes should be provided as the preferred on-street bikeway facility. Class III bike routes should be used when Class II bike lanes are not feasible due to existing physical or environmental constraints. As with bike lanes, the designation of bike routes should indicate to bicyclists that there are particular advantages to using these routes as compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists.
- Off-Street Bikeways - Where feasible, Class I bike paths with a minimum pavement width of 10 feet should be implemented. These bikeways provide a higher degree of safety and recreational benefit than bikeways located on streets. They can also become linear parks, adding to the range of amenities for local communities. In many areas of region, the cost of constructing off-street bikeways may be competitive with that for on-street facilities due to the physical characteristics of the existing roadway system.

Figure 5 on the following page displays the proposed bikeway and pedestrian system that resulted from the development and refinement process.

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N:\Projects\1012\1449\GRAPHICS\FIGURE4_accid.dwg

City of Oakdale Bikeway and Trail Master Plan
THREE-YEAR BICYCLE ACCIDENT SUMMARY (1998-2000)
FIGURE 4

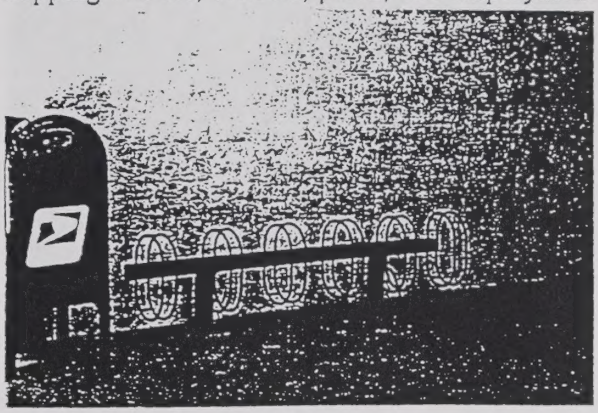
MULTI-MODAL CONNECTIONS

Multi-modal connections in the region are important due to barriers for continuous bicycle and pedestrian travel such as rail lines, high-volume state highways, or lack of existing continuous bikeway and pedestrian facilities. Existing fixed-route transit service in the City of Oakdale is provided by Stanislaus County Transit (SCT). The SCT routes in the City of Oakdale are primarily focused on the SR 108 corridor, G Street, and South Yosemite Avenue. In addition to fixed-route systems, demand responsive service is provided by the Riverbank-Oakdale Transit Authority (ROTA).

The SCT and ROTA buses are equipped to allow bikes on the buses. However, bicycle parking facilities are not available at all transit stops. Limiting bicycle access to transit and not providing secure bicycle parking at transit stops can limit bicycle mobility. Bicyclists often rely on transit service to transfer them to destinations safely when barriers to continuous travel are present.

SUPPORT FACILITIES

Bikeway and pedestrian support facilities include physical infrastructure designed to accommodate or promote bicycling and walking. Examples include bicycle racks, bicycle lockers, restrooms, and shower facilities. A windshield survey of major shopping centers, schools, parks, and employment centers found bike racks like the one shown to the right, located in some locations but no evidence of other support facilities such as bicycle lockers, restrooms, or shower facilities. Support facilities are important because potential bicycling or walking trips may be discouraged if sufficient facilities are not present at destinations to make bicycling and walking convenient. In many cities and counties, the installation of secure bicycle parking is required as part of local transportation system management plans, or the zoning code, to encourage the use of bicycles as an alternative to automobile use.



BICYCLE SAFETY

Bicycle safety was evaluated as part of the BTMP development process. In particular, existing available bicycle accident data was reviewed to identify accident locations within the city limits.

ACCIDENT DATA

Accident data was provided by the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) Statistics. This data represents all bicycle related accidents occurring in the City

of Oakdale between January 1998 and December 2000. Table 1 summarizes the accident data by year, severity, and party at fault.

Table 1

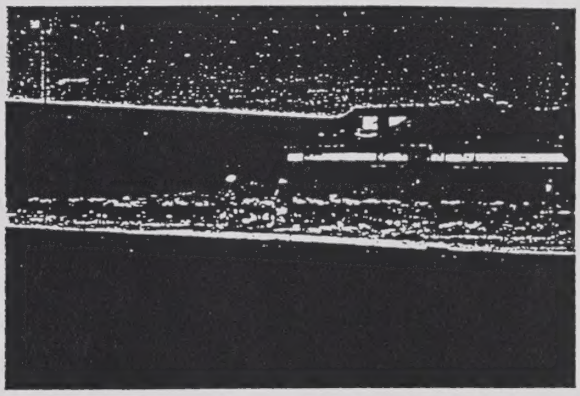
City of Oakdale Bicycle Accident Summary

(January 1998 to December 2000)

	Accidents		Party at Fault	
Year	Total	Injury	Bicycle	Driver
1998	12	11	10	2
1999	7	7	7	0
2000	4	4	1	3
Total	23	22	18	5

Source: Reported accidents according California Statewide Integrated Traffic Records System (SWITRS)

TRENDS AND COMPARISONS



As shown in Table 1, twenty-three bicycle accidents were reported between January 1998 and December 2000. Primary causes of these accidents were illegal turning movements, right-of-way violations, and other vehicle code violations by drivers and bicyclists. Although there were no fatalities reported, twenty-two of the twenty-three accidents resulted in injuries. Bicyclists were at fault in eighteen of the twenty-three accidents and nearly two-thirds of all accidents involved riders under the age of 18. Another factor in the City of Oakdale is the presence of two State routes bisecting the community. Over 70 percent of accidents involving riders under the age of 18 occurred either on or within one block of the State routes. The OTAC has determined that future bicycle facilities should avoid the State routes except for at signalized intersections.

This information suggests that increased education and enforcement should be an important tool in decreasing bicycle accidents. Figure 4 on the attached page shows the location of each bicycle accident reported in Table 1. The information shown in the figure also indicates the party at fault and the severity of the accident. Further accident data is summarized in Appendix B.

In an effort to compare the rate of bicycle accidents in the City of Oakdale with other locations, Table 2 was prepared which shows a calculated bicycle accident rate based on number of bicycle accidents per 1,000 persons for several California communities. This information is only intended

for comparison purposes and does not contain sufficient data to demonstrate any statistical relationships.

Table 2

Comparison of Bicycle Accidents on Local Roads per 1,000 Persons

(Selected California Cities)

City	Population	Accidents per Year	Accidents per 1,000 Persons
City of Oakdale[a]	**15,000**	**8**	**0.53**
City of Lincoln[b]	10,000	15	1.50
City of Citurs Heights[c]	88,000	26	0.30
City of Livermore[c]	63,000	43	0.68
City of Yuba City[c]	32,000	38	1.19
City of Marysville[c]	13,000	10	0.77
City of Visalia[d]	70,000	78	1.11
City of Roseville[d]	35,000	32	0.91
City of Santa Rosa[d]	115,000	90	0.78
City of Escondido[d]	105,000	88	0.84
Average	**54,600**	**42.8**	**0.86**

Notes:
a Reported accidents, 3 year average (1998-2000)
b Reported accidents, 3 year average (1997-1999)
c Reported accidents, 3 year average (1996-1998)
d Reported accidents in latest year (1990-1992)

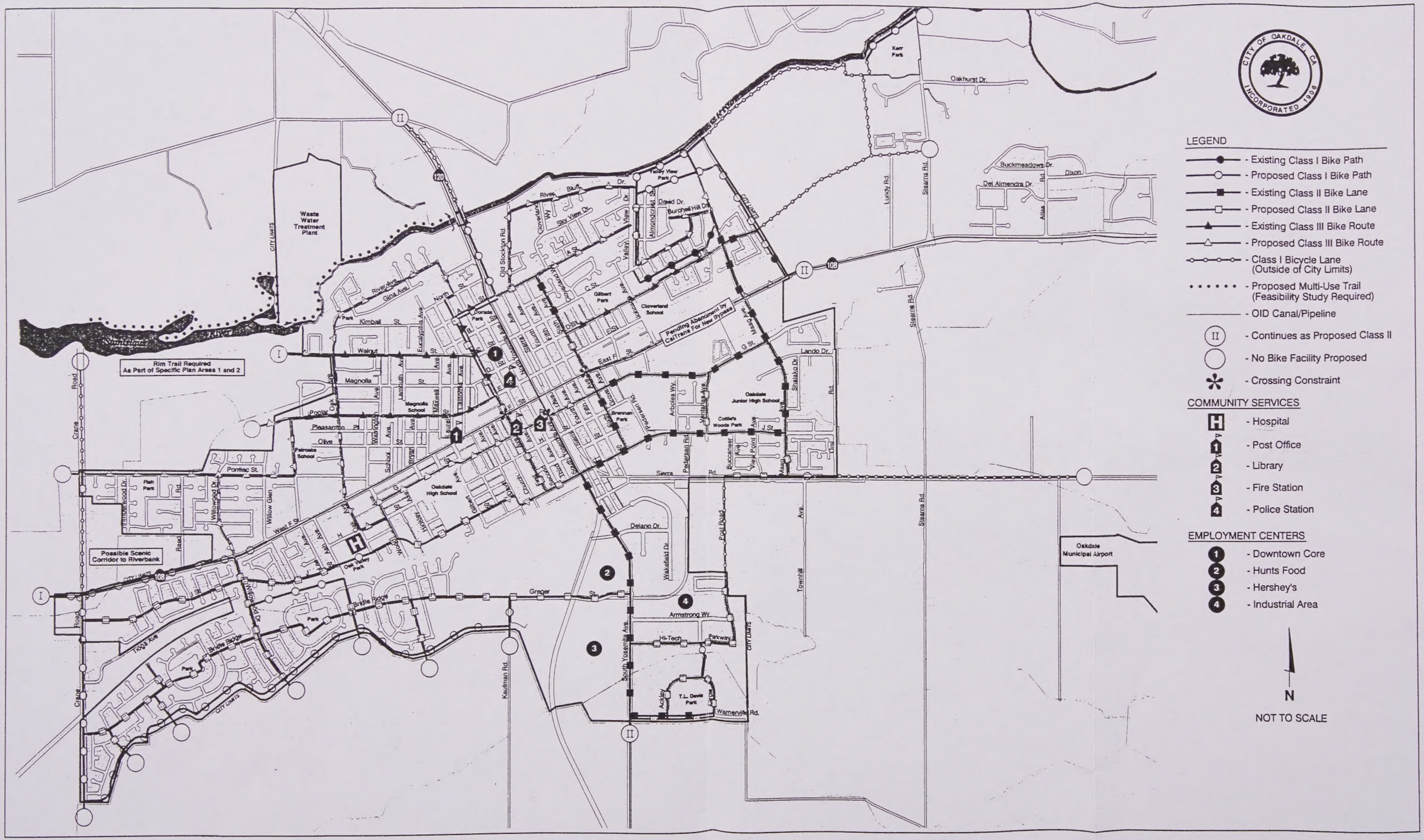
Source: Local Police Reports and California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) Statistics.

Table 2 indicates that the calculated bicycle accident rate for the City of Oakdale is relatively low when compared to other California communities. A higher density of streets and households and greater traffic volumes contribute significantly to the higher number of bicycle and pedestrian accidents in most cities. Additionally, because this information reflects reported accidents only, they do not include unreported accidents and under-counted non-automobile-related accidents. For example, bicycle-bicycle or bicycle-pedestrian accidents tend to be less severe and consequently under-reported.

SAFETY PROGRAMS

Safety is a major concern of both existing and potential users of the bikeway and pedestrian system. For existing and potential users, perceptions about the safety are one of the main reasons people do not bicycle or walk more often. This concern is understood given the potential for serious injuries for bicyclists or pedestrians that are involved in accidents with vehicles. These reasons make safety education for both children and adults an important component of this plan.

Existing bicycle and pedestrian safety programs in the region were reviewed as part of this planning effort. The results are summarized in Table 3.



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N:\Projects\1012\1449\GRAPHICS\FIGURE5_prop_sys.dwg

City of Oakdale Bikeway and Trail Master Plan
EXISTING AND PROPOSED BICYCLE ROUTE SYSTEM

FIGURE 5

The proposed system includes a total of approximately 29 miles (46 km) of new bikeway and pedestrian facilities. Table 6 shows the number of proposed miles and kilometers for each bikeway classification.

Table 6
Length of Proposed System by Bikeway Classification
Miles (Kilometers)

Bikeway Classification	Existing	Proposed	Total
Class I	0.60 (0.96)	11.39 (18.23)	10.14 (19.19)
Class II	4.68 (7.49)	9.65 (15.44)	14.33 (22.93)
Class III	3.03 (4.84)	7.80 (12.47)	10.61 (17.31)
Total	8.31 (13.29)	28.84 (46.14)	37.15 (59.43)

Although sidewalks are not shown in the plan, pedestrians will have full access to the Class I bike paths and in many locations benefit from the presence of roadway shoulders where none exist today. Each route is classified according to standards displayed in Figure 2. However, the reader should note that the Class III bike route standards do not specify a minimum shoulder width or roadway lane width. For the purposes of this plan, a minimum shoulder width of three feet is desirable but physical conditions may dictate a narrower lane width for individual projects depending on the findings of the City. Further, the minimum width for a Class I bike path is eight feet, but a minimum width of 10 feet is desirable due to the potential for multiple users (i.e., in-line skaters, pedestrians, etc) on these paths.

Regional and Multi-Model Bikeway Connections

Regional connections include those bikeway facilities that connect the City of Oakdale to surrounding communities such as Escalon, Riverbank, and Modesto. Multi-modal connections allow bicyclists and pedestrians to transfer to other modes such as buses. Including these components in the discussion of the proposed system is important for the development of a bikeway system that provides a high degree of accessibility and mobility.

Regional Connections

In the development of the proposed bikeway and pedestrian system, an effort was made to assess the potential connectivity of individual facilities with existing or planned facilities in surrounding communities. As discussed in the existing conditions section, limited facilities exist that offer continuous bicycle or pedestrian connections to surrounding communities. The proposed system identifies whether planned facilities will connect to existing or planned facilities in the surrounding communities (refer to Figure 5).

MULTI-MODAL CONNECTIONS

The proposed bikeway system includes routes that connect with the existing transit centers and overlap with existing transit routes. To facilitate use of these routes by bicyclists, all transit buses and major transit stations should be equipped with bike racks.

SUPPORT FACILITIES AND PROGRAMS

Support facilities and educational programs are an important part of the proposed bikeway system. Specific recommendations on how to provide a high degree of support are discussed below.

BICYCLE PARKING, SHOWER, AND LOCKER FACILITIES

Support facilities such as bicycle parking, shower and locker facilities can encourage bicycling by reducing the threat of theft and making riding more convenient. Properly designed bike racks should be available at major bicycle destinations. For the most part, these facilities should be required for new developments that are likely to experience a demand for bicycle parking such as commercial areas, parks, libraries, schools, and major employers. In some cases, though, existing activity centers should add bicycle parking facilities. The type of parking facility (bike rack or bicycle locker) should be selected based on (a) cost, (b) ease of use, and (c) ability to prevent theft.

Access to shower and locker facilities may help encourage people to commute by bicycle. Many jobs require employees to wear specific uniforms or formal attire. By having shower and locker facilities, employees have the option to shower and dress at work. This is an important consideration for bicycle commuters since they cannot control their travel environment and are much more dependent on support facilities located at the workplace.

The following action is recommended for increasing the number of locations with bicycle parking, shower, and locker facilities:

- Encourage the installation of bicycle parking, shower, and locker facilities as conditions of approval for major new developments.

CROSSING PROTECTION

These improvements should be targeted for major intersections on the proposed bikeway and pedestrian system, and at locations where school children cross a busy street to gain access to their school. The following steps are recommended to build upon this effort.

- Use signing, striping, crossing guards, flashing beacons, and bicycle/pedestrian actuated signals at street crossings with high levels of pedestrian and bicycle demand when warranted by engineering standards.

- Install detectors at signalized intersections along the bikeway system as intersections are upgraded. Detectors should be located within the striped bike lane either along the curb or between the right-turn lane and through lane.
- Incorporate traffic calming measures such as raised crosswalks or raised intersections when necessary.

EDUCATIONAL PROGRAMS

Programs to teach existing and potential bicyclists about the fundamentals of bicycle riding are important to establishing good riding habits. Elementary school children in the region receive some bicycle-riding safety education by law enforcement officials. The following steps are recommended to build upon this effort.

- Continue and expand the current bicycle education program for school children. Some existing programs are currently offered on an as needed basis by law enforcement agencies without interagency cooperation. A coordinated proactive effort between the CHP, local law enforcement agencies, and educational institutions would be more efficient and productive.
- Establish an adult bicycle education program through the parks and recreation departments or other local agency departments that teaches adults how to ride defensively and encourages people to ride to work. This program may include the use of volunteers and possibly sponsorship of bicycle tours and races.
- Include bicycle and pedestrian safety information as part of visitor packages offered through visitor centers, bicycle shops, chamber of commerce, etc.

VI. COST AND FUNDING ANALYSIS

Implementation of the proposed bikeway and pedestrian system will require funding from local, state, and federal sources and coordination with multiple agencies. To facilitate funding efforts, this section presents conceptual construction cost estimates for the proposed system along with a brief description of past expenditures for bikeway and pedestrian facilities.

COST ESTIMATES

Table 7 contains a unit cost summary for the construction of bikeway and pedestrian facilities in the region. These cost estimates are based on actual costs experienced in the City of Oakdale and similar communities in California. However, they should be used only to develop conceptual construction cost estimates. More detailed estimates should be developed after preliminary engineering as individual projects advance to implementation.

Table 7

Conceptual Unit Cost Estimates for Bikeway Construction

Facility Type	Estimated Cost Per	
	Mile	Kilometer
Class III Bike Route		
signing only	$1,000	$1,600
signing plus minor road improvements	$40,000	$64,400
signing plus moderate roadway improvement	$150,000	$241,400
signing plus major roadway improvement	$300,000	$482,700
Class II Bike Lane		
signing and striping only	$5,000	$8,000
signing and striping plus minor roadway improvement	$50,000	$80,500
signing and striping plus moderate roadway improvement	$300,000	$482,700
signing and striping plus major roadway improvement	$500,000	$804,500
Class I Bike Bath		
construct asphalt path on graded right of way with drainage and new sub-base	$500,000	$804,500
construct asphalt path on un-graded right of way with drainage and new sub-base	$1,000,000	$1,609,000

For the purposes of this plan, conceptual construct costs for the proposed system were based on the minimum level of potential improvements based upon the level terrain, wider street rights-of-way, and a field survey conducted by the consultant. Costs for construction of the proposed Class I path along the Stanislaus River are assumed to be approximately $1,000,000 per mile based upon the existing topography and environmental

constraints. A summary of the system costs is presented in Table 8 by type of facility. Conceptual construction cost estimates for individual routes are contained in Appendix C.

Table 8 Conceptual Construction Cost Estimate Summary	
Bikeway Classification	Cost
Class I Bike Path	$6,499,900
Class II Bike Lane	$48,100
Class III Bike Route	$7,690
Total	**$6,555,690**

Table 8 shows a total cost for constructing the proposed system of approximately $6.5 million. Many funding opportunities exist at the federal, state, and local levels for constructing bikeway facilities. A general description of these sources is provided below. More detailed funding information can be obtained from STANCOG and Caltrans.

POTENTIAL FUNDING SOURCES

In some cases, portions of the proposed system will be completed as part of future development and road widening and construction projects. For those portions that will rely on other funding mechanisms, the following discussion provides descriptions of potential funding sources.

FEDERAL SOURCES

Federal funding through the TEA-21 (Transportation Equity Act for the 21st Century) program could provide the bulk of non-local funding. TEA-21 consists of three major programs:

- Surface Transportation Program (STP);
- National Highway System (NHS); and
- Congestion Mitigation/Air Quality Program (CMAQ).

Other related federal programs include the following:

- Transportation Enhancement Activities (TEA);
- Hazard Elimination;
- Bridge Repair and Replacement;
- National Recreation Trail;
- Bicycle Transportation and Pedestrian Walkways;
- Transit Enhancement Activity;
- Scenic Byways; and

- Section 402 (Safety).

TEA-21 funding is administered through the state and regional governments. The City of Oakdale is located in the jurisdiction of the regional Stanislaus Area Association of Governments (STANCOG) agency. TEA-21 funding would be administered through STANCOG. Most of the funding programs are transportation versus recreation oriented, with an emphasis on (a) reducing auto trips and (b) providing an intermodal connection. Funding criteria includes completion and adoption of a bikeway master plan, quantification of the costs and benefits of the system, proof of public involvement and support, environmental compliance, and commitment of local resources. In most cases, TEA-21 provides matching grants of 80 to 90 percent. Other federal funding sources include the Land and Water Conservation Fund Program and the Recreation and Public Purposes Act (Bureau of Land Management).

STATE SOURCES

The following State of California sources provide funding that could be applicable for the City of Oakdale.

BICYCLE TRANSPORTATION ACCOUNT

The State Bicycle Transportation Account (BTA) is an annual program that is available for funding bicycle projects. Available as grants to local jurisdictions, the emphasis is on projects which benefit bicycling for commuting purposes. Funding for this program was recently increased from $360,000 annually to approximately $5,000,000 annually by 2003 due to the passage of Assembly Bill 1020.

ENVIRONMENTAL ENHANCEMENT AND MITIGATION PROGRAM (EEM)

Bicycle projects can qualify for EEM funds if they meet the program's requirements. Any non-profit organization can sponsor projects, which are submitted to the State Resources Agency for evaluation in June/July of each year.

ASSEMBLY BILL 1475 - SAFE ROUTES TO SCHOOL BILL

This bill redefines transportation safety in California by investing $20 million per year in bike lanes, bicycle and walking trails, new sidewalks and traffic-calming projects near California schools. The first round of project solicitation has been completed. A second round is underway, however, applications were due by June 2001. It is anticipated that this program will continue and provide opportunities for future funding applications.

Regional Improvement Program

This is a funding category created by Senate Bill 45 that can be used for a variety of projects, including transit stations, road rehabilitation, rail lines, and road improvements.

State Highway Operations and Protection Program

Known as the SHOPP, this program is a state-funding category used by Caltrans to maintain and operate state highways.

Local Sources

A variety of local sources may be available for funding bikeway and pedestrian improvements; however, their use is often dependent on political support.

Local Transportation Fund

Established by the California legislature under the state Transportation Development Act of 1972, local transportation fund (LTF) revenues are derived from a one-quarter cent of the State's current 7.25% sales tax collected statewide. These funds are used for transit, special transit for disabled persons, and bicycle and pedestrian purposes. They are collected by the State Board of Equalization but are administered locally through STANCOG.

New Construction

Future road widening and construction projects are one means of providing on-street bikeways and sidewalks. To ensure that roadway construction projects provide these facilities where needed, roadway design standards need to include adequate minimum cross-sections. Further, the review process for new development should include input pertaining to consistency with the proposed system.

Assessment Districts

Different types of assessment districts can be used to fund the construction and maintenance of bikeway and pedestrian facilities. Examples include Mello-Roos Community Facility Districts, Infrastructure Financing Districts (SB 308), Open Space Districts, or Lighting and Landscape Districts. These types of districts have specific requirements relating to their establishment and use of funds.

Other Sources

Local sales taxes, developer or public agency land dedications, private donations, and fund-raising events are other local options to generate funding for bikeway and pedestrian projects. Creation of these potential sources usually requires substantial local support.

Funding Strategy

Limited information is available about past expenditures for bikeway and pedestrian facilities in the region as well as the future funding levels that will be available for these types of improvements. Nevertheless, understanding the City's investment in the existing system and what is required to complete the system is important in developing a funding strategy. With an approximate total length of over 8 miles (over 13 kilometers), the existing system represents a substantial investment. To add approximately 29 miles (46 kilometers) of new facilities to this system will require an investment of approximately $6.5 million, which equates to an annual cost of approximately $325,000 per year over 20 years in constant 2001 dollars. Although some of the proposed system will be constructed as new development or re-development occurs, a substantial portion of the total cost will rely on public funding. With this understanding, the following options should be considered by the region for fulfilling the funding commitment necessary to complete the proposed system:

- Prepare joint applications with other local and regional agencies for competitive funding programs at the state and federal levels;
- Use existing funding sources as matching funds for state and federal funding;
- Include bikeway and pedestrian projects in local traffic impact fee programs; and
- Include proposed bikeways as part of roadway projects involving widening, overlays, or other improvements.

Local jurisdictions should also take advantage of private contributions, if appropriate, in developing the proposed system. This could include a variety of resources such as volunteer labor during construction, which is becoming popular for recreational improvements, or monetary donations towards specific improvements.

VII. IMPLEMENTATION

This section addresses a number of issues related to implementation of the proposed system. It includes a discussion of phasing and priorities for implementing specific routes and also contains typical design standards for each bikeway classification.

BIKEWAY SYSTEM PHASING

The specific implementation of any given route, with all other things considered equal, should be based on the following criteria:

- Where an opportunity, such as a road widening or re-paving, makes implementation favorable;
- Where an eminent loss of an opportunity, such as the sale of a railroad right–of–way, makes implementation necessary;
- Where resolution of a major obstacle, such as access to flood channel right–of–way, makes implementation necessary; and
- Where the segment is not disconnected or otherwise poorly accessible from the rest of the system.

In many situations, the most needed bikeway improvement may not be implemented first. In these cases, external factors such as new road construction create opportunities to provide new bikeway and pedestrian facilities without consideration for need. Therefore, the proposed system does not include a ranking of specific routes, but does include the following list of high priority routes.

PRIORITY ROUTES

Priority routes were selected based on expected use, type of route, connectivity, and potential improvements to safety. The following routes currently have the highest priority for implementation (not in priority order).

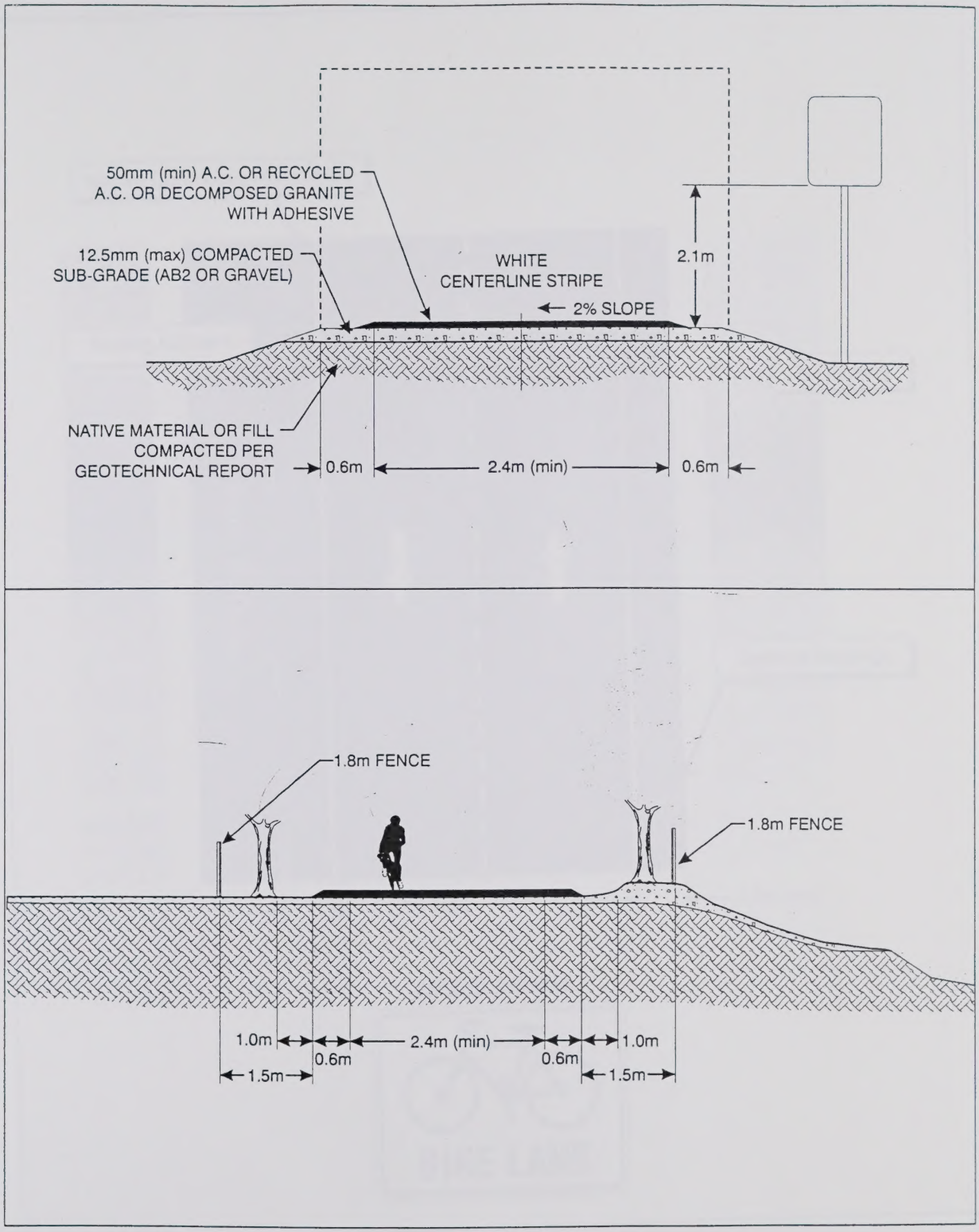
- Class I Path along Stanislaus River – Class I multi-use path connecting Oakdale City limits to City of Oakdale Kerr Park.
- Class I/II Path and Bike Lanes to Industrial Area Using Post Road – A two-phase project which includes Class II bike lanes along Maag Avenue from J Street to Sierra Road, and Class II bike lanes along Sierra Road from Maag Avenue to Post Road as Phase I. Phase II includes Class II bike lanes on Post Road from the proposed Class I to Hi-Tech Parkway, and Class II bike lanes on Hi-Tech Parkway from Post Road to South Yosemite Avenue.
- Class I/II Path and Bike Lanes on J Street – Class II bike lanes along J Street from the High School at Gilbert Avenue to Oak Valley Park, a Class I path through Oak Valley Park, and Class II bike lanes on J Street from Oak Valley Park to the eastern boundary of the Bridle Ridge Specific Plan area.

- Class I Path as Extension of D Street – A two-phase project which includes a Class I path from the eastern city limits at D Street to the southwest corner of the Belsera Development as Phase I, and a Class I path behind the Belsera Development from the southwest corner of the development to the proposed Class I path at Kerr Park as Phase II.
- Class II Bike Lanes on Ventanas Avenue – Class II bike lanes on Ventanas Avenue from G Street to J Street completing a loop around Oakdale Junior High School.
- Class II Bike Lanes on J Street and 1st Street – Class II bike lanes on J Street from South Yosemite Avenue to 1st Street and along 1st Street from J Street to G Street.

Refer to Appendix D for detailed information for each priority project.

BIKEWAY DESIGN STANDARDS

The Caltrans "Highway Design Manual" and AASHTO "Guide for the Development of Bicycle Facilities" provide extensive detail on the design for bikeways. These design standards provide a good framework for future implementation, but may not always be feasible given the terrain and environmental constraints of the region. Bikeway design and planning standards are continually changing and expanding. For example, there is pressure from the bicycling public to allow bike lanes that are narrower than current standards to be installed on existing streets. However, local jurisdictions must be protected from liability concerns so most agencies adopt the Caltrans or AASHTO standards as a minimum. Examples of typical standard design treatments for Class I, Class II, and Class III bikeways are provided in Figures 6 through 8. This information is provided to assist local agency staff in the design and construction of future bikeway facilities. With these standards and other information contained in this BPMP, the region is prepared to take the next step in advancing bikeway and pedestrian projects from the planning stage to the design and construction phase.



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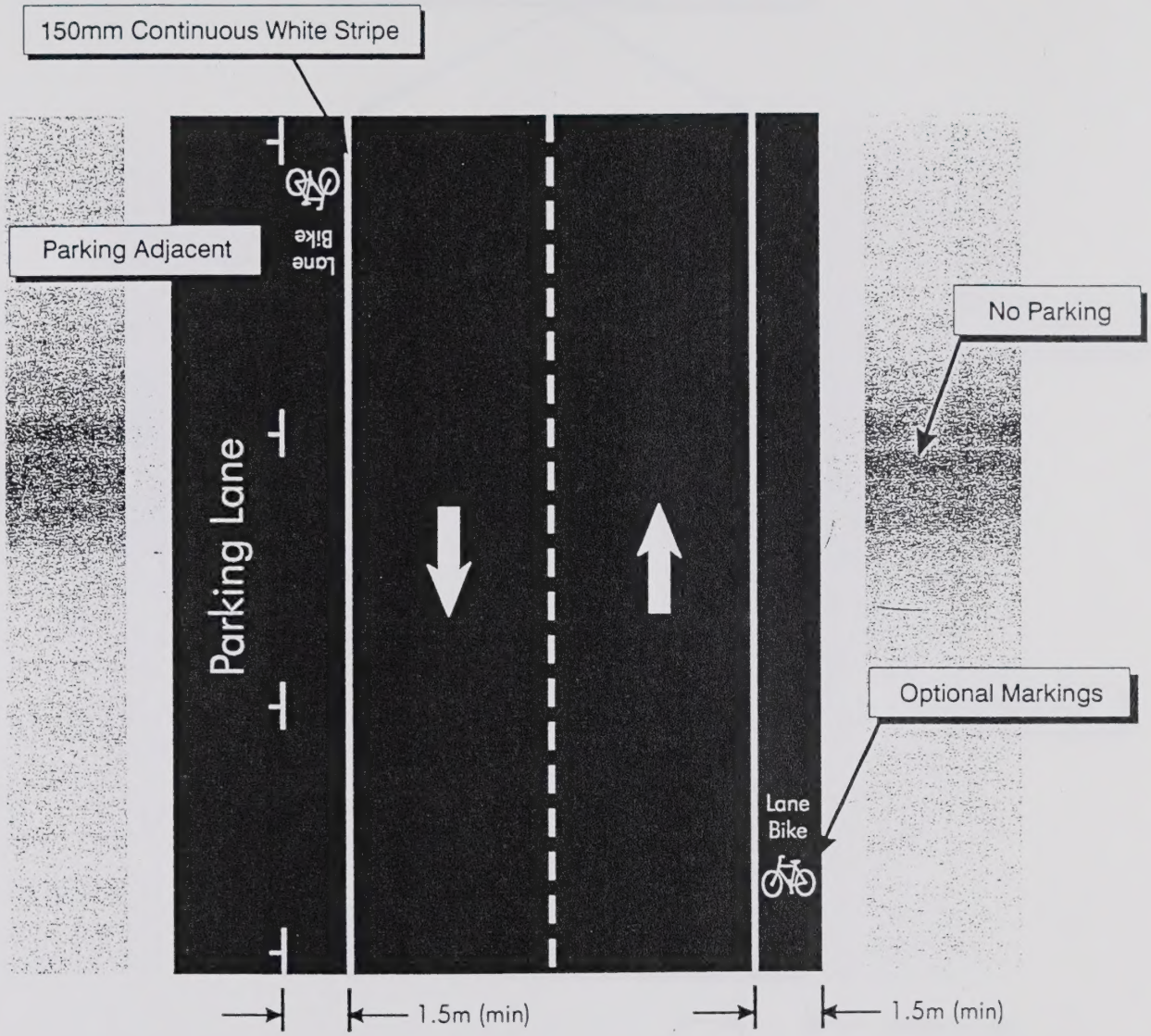
TYPICAL CLASS I BIKE PATH

FIGURE 6



TYPICAL SIGNING

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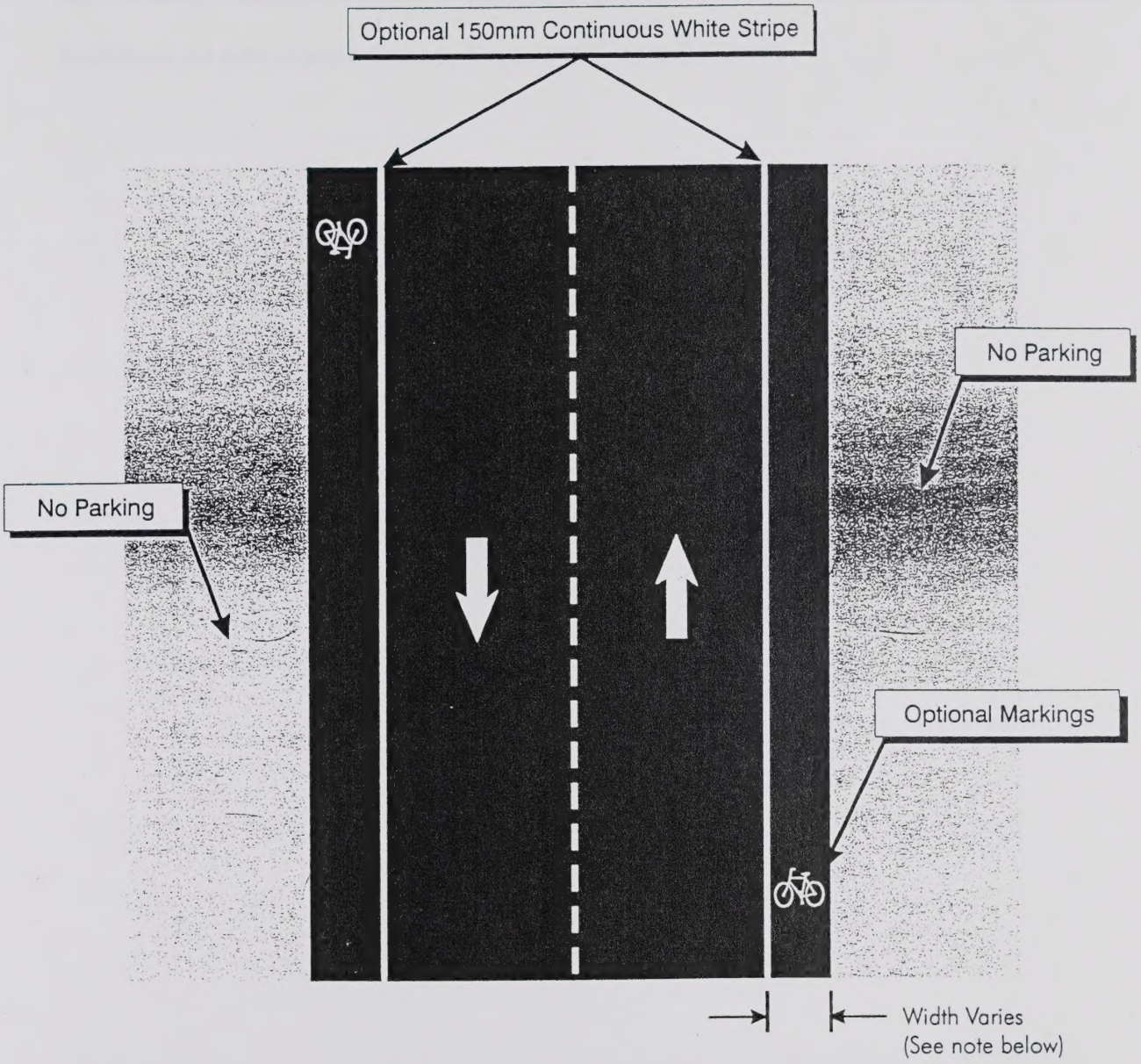
TYPICAL CLASS II BIKE LANES

FIGURE 7



TYPICAL SIGNING

NOTE:
Bike route width varies. It is desirable to have a minimum bicycle travel way. However, due to various constraints/conditions, a minimum width cannot be established.

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TYPICAL CLASS III BIKE ROUTES

FIGURE 8

Appendix A

Summary of Applicable Goals, Objectives, and Policies

Existing Goals, Objectives, and Policies

The following section provides paraphrased excerpts of policy and design documents from various plans and studies pertinent to the City of Oakdale. The purpose of presenting this information is to provide a synopsis of the existing and/or proposed policies and standards that will relate to the City of Oakdale Bikeway and Trails Master Plan. Policies and standards relating specifically to implementation and design of the proposed bikeway system will be presented in the Goals and Policy section. The following goals and policies are relevant to the development of the City of Oakdale Bikeway and Trails Master Plan.

City of Oakdale General Plan – Circulation Element – January 1994

Goal CT2: Provide a safe, convenient and efficient multi-modal transportation system capable of meeting the needs of the residents and businesses to move people and goods and avoid congestion within the City of Oakdale.

Goal CT12: Integrate pedestrian, bicycle, and public transit components into major collector designs.

Goal CT15: Integrate Redevelopment Area designs, pedestrian, bicycle, and public transit components into collector street designs. The City may require the construction of, or fees in lieu of, pedestrian and bikeways separate from sidewalks, as a condition for approval of new subdivisions.

Policy 83: Require bicycle parking and amenities at commercial developments.

Policy 89: Link parks, schools, easements, collectors, and major employers with bicycle, pedestrian and equestrian paths. Greenbelt corridors shall be considered to enhance the community character, provide buffers, and create recreation and non-vehicle circulation options.

Policy 90: Develop imaginative open space/parks in conjunction with "problem areas" such as PG&E rights-of-way, to provide bike paths and open space buffers between residential and commercial uses.

Policy 91: As they become available consider acquisition of railroad rights-of-way for use as pedestrian, bicycle, transit or potential parkway corridors.

Stanislaus Area Association of Governments (SAAG) Regional Bicycle Transportation Master Plan, July 1996

Goal 1: Begin development of a County-wide bicycle system that serves the needs of commuter bicyclists in the County and that serves as an alternative to motorized transportation.

Goal 2: Integrate and coordinate the County-wide bicycle system with other bicycle systems of communities in the County that have bicycle or non-motorized transportation master plans.

Goal 3: Link the County's communities to major employers, major commercial areas, schools, and public services; and to surrounding County and State bicycle systems.

Goal 4: Work with the County and cities to establish a regular maintenance program to ensure safe and well maintained bicycle facilities as they are developed in the County.

Goal 5: Work with the County and cities to establish policies and programs that provide or encourage the provision of bicycle support facilities such as bicycle parking and showers.

Goal 6: Work with the County and cities to establish programs and policies that encourage bicycle-friendly development.

Goal 7: Work with the County and cities to establish a program that seeks to establish bicycle-to-transit connections throughout the County and that encourages the accommodation of bicyclists and bicycles on public transit.

Goal 8: Work with the County and cities to establish a comprehensive program of community education and feedback.

Goal 9: Plan for development of a County-wide bicycle system that serves the needs of recreational bicyclists.

Goal 10: Link the County's communities to regional parks and recreation areas.

Goal 11: Work with irrigation districts, railroads, and other owners of linear rights-of-way that have the potential to accommodate bicycle facilities, the development of which would strengthen the County-wide bicycle transportation system.

Goal 12: Seek regular, dedicated local funding for implementing the bicycle master plan, and establish a program to seek State and other public development and maintenance funding as available.

Burchill Hill Specific Plan, Circulation Element – April 1997

Objective B.2: Provide a street network and system of trails that encourage pedestrian usage and bicycle circulation

Policy B.2.a: A perimeter walking and biking trails shall be provided as indicated in Figure 15 (Mitigation Measure 2.a.1).

Policy B.2.b: A Class I bikeway facility shall be located within the landscaped parkway on Valley View Drive.

Policy B.2.c: A landscaped Class I bike facility shall be located within both the OID and PG&E easements (refer to Figure 21).

Policy B.2.d: All Class I bike facilities shall conform to Chapter 1000 of the Caltrans Highway Design Manual (Mitigation Measure 13.f.2).

Policy B.2.e: Traffic calming intersection bow-outs shall be used where a collector street intersects with a local residential street or other collector street, consistent with Figure 15 (Mitigation Measure 13.f.1).

Policy B.2.f: Pedestrian sidewalks or pathways shall be provided on all streets.

Policy B.2.g: Direct street access or cul-de-sac outlets shall be provided along all bikeways and trails at a minimum of every 300 feet.

Policy B.2.h: The City shall provide park improvement credits for all trail improvements.

Policy B.2.i: Class III Bikeways shall be designated on all collector streets.

Policy B.2.j: Where trails also serve as sidewalks they shall be constructed of concrete. Other trails may be constructed using asphalt. All trails will be accessible to service vehicles and police car patrols.

GOAL: Establish a pedestrian and bicycle-friendly environment that includes both on-street and off-street pedestrian and bicycle facilities to encourage non-vehicular travel both within the Specific Plan area and the City.

Policy 6.15: Provide growth with a balanced orientation toward pedestrian, bicycle, and automobile circulation.

Policy 6.16: In order to encourage walking and cycling, extend bicycle and pedestrian paths from residential areas to key activity areas/destination points such as schools, parks and retail center.

Policy 6.17: Provide sidewalks along Specific Plan roadways. On major and local street corridors, sidewalks will be separated from the roadway by a planting strip unless otherwise modified by this plan.

Policy 6.18: Develop a multi-purpose bicycle/pedestrian trail through the parkways proposed along the south side of the Burlington Northern and Santa Fe Railroad right-of-way where designated on the Bridle Ridge Land Use Map.

Policy 6.19: Develop a multi-purpose bicycle/pedestrian trail along the east side of Crane Road from F Street to the OID easement at the southwest corner of the Specific Plan area.

Policy 6.20: Provide Class II bike lanes along the following collector streets: J Street, Bridle Ridge Way, Willowood Drive, and the southern connector street in the southwest corner of the Specific Plan area.

Policy 6.21: Provide bicycle and pedestrian connections to the proposed citywide trail in the OID easement that borders the Specific Plan area on the south.

Policy 6.22: Upgrade the existing Ash Avenue railroad underpass access to provide pedestrian/bicycle connection between the planning area and existing neighborhoods and to allow emergency vehicle access, but no other vehicular access.

Policy 6.23: An alternative drive-over curb will be allowed on typical local residential streets as identified in this plan.

GOAL: To establish a vehicle circulation system that provides sufficient capacity for projected traffic and allows convenient access to land uses, while maintaining a neighborhood scale to the residential street system.

Policy 6.25: Locate key community destinations, such as the commercial center, school, and sports park, near collector streets in order to minimize the intrusion of vehicular traffic into the residential neighborhoods. Link these destinations to pedestrian/bicycle corridors and to transit stops to allow residents to use these facilities without having to drive.

GOAL: To reduce residents' reliance on the automobile by providing for convenient transit services and facilities in the Specific Plan area.

Policy 6.28: Pedestrian/bikeway connection points shall be provided at well-spaced intervals (1,000 feet on average) along the OID Crane Lateral and the Burlington Northern and Santa Fe railroad.

Appendix B

Accident Data Summary

Oakdale Accident Summary

1998 Thru Available 2001

Data

Date	Day	Time	At Fault	Injury	Location	Age	Sex	Collision Factor	Notes
1/4/1998	Sunday	3:33 PM	Bicycle	Y	Rt. 120/6th	50	M	Alcohol	Bicycle HBD
2/28/1998	Saturday	1:04 PM	Bicycle	Y	Pontiac/Stonewood	16	M	Other Hazard	
3/9/1998	Monday	5:00 PM	Driver	Y	E/2nd	12	F	Wrong Side	
3/28/1998	Wednesday	5:55 PM	Bicycle	Y	S. Yosemite/G	13	F	ROW Violation	
4/26/1998	Sunday	4:27 PM	Bicycle	Y	North/1st	9	M	ROW Violation	
5/17/1998	Sunday	1:36 PM	Bicycle	Y	Gilbert/Rt. 108	15	M	Wrong Side	
5/18/1998	Monday	7:01 PM	Bicycle	Y	I/1st	33	M	Other Hazard	
6/18/1998	Thursday	8:58 PM	Bicycle	N	Valmor/Lee	7	M	Unknown	
9/26/1998	Saturday	9:44 PM	Driver	Y	Rt. 120/8th	19	M	Unknown	
10/9/1998	Friday	7:26 PM	Driver	Y	Rt. 120/Grove	15	M	Wrong Side	
10/28/1998	Wednesday	8:02 PM	Bicycle	Y	E/2nd	45	M	Alcohol	Bicycle HBD
12/8/1998	Tuesday	5:00 AM	Driver	Y	Rt. 120/Johnson	16	M	ROW Violation	
3/18/1999	Thursday	4:05 PM	Bicycle	Y	I/5th	50	M	Hit Fixed Object	
4/21/1999	Wednesday	6:36 PM	Bicycle	Y	Pontiac/Lee	10	M	Brakes	
5/25/1999	Tuesday	8:30 PM	Bicycle	Y	J/Sierra	14	M	Stop Sign Violation	
6/4/1999	Friday	4:03 PM	Bicycle	Y	C/Rt. 120	12	M	ROW Violation	
6/9/1999	Wednesday	8:50 PM	Bicycle	Y	A/Cloverland	8	F	Improper Turn	
9/6/1999	Monday	11:40 AM	Bicycle	Y	Rt. 120/Johnson	51	M	Improper Turn	
11/29/1999	Monday	4:48 PM	Bicycle	Y	Rt. 120/8th	16	M	Wrong Side	
2/2/2000	Wednesday	3:55 PM	Bicycle	Y	Yosemite/South	9	M	Improper Turn	
3/29/2000	Wednesday	4:50 PM	Driver	Y	S. Yosemite/G		M	ROW Violation	
6/20/2000	Tuesday	8:56 AM	Driver	Y	Rt. 108/1st	33	F	ROW Violation	
7/23/2000	Sunday	7:04 PM	Driver	Y	Sierra/South	10	M	Improper Turn	
10/3/2000	Tuesday	7:31 PM	Bicycle	Y	G/Maag	50	F	Other Hazard	
11/1/2000	Wednesday	10:28 AM	Bicycle	N	Rt. 108/Gilbert	16	M	Improper Turn	
2/8/2001	Thursday	7:37 AM	Driver	N	Pontiac/Lee	9	F	Alcohol	Driver HBD

Summary

Totals	At Fault	Injury/Non-Injury	Age	Sex
	18 Bicycle	23 Injury	17 Riders under age 17	20 Males
	8 Driver	3 Non-Injury	9 Riders over age 17	6 Females

Appendix C

Conceptual Cost Estimates for Individual Routes

Appendix D

Priority Route Project Descriptions

Oakdale Bicycle and Trails Master Plan

Preliminary System Cost Estimates

Legend
Class I Bike Path
Class II Bike Lane
Class III Bike Route

Existing System

Segment Marker	Classification	Segment Name	From	To	Distance in Feet	Distance in Miles	Distance in Kilometers
E-I.1	E-I	Residential	C St	Maag ave	2544.93	0.48	0.77
E-1.2	E-I	East City Limits	East F St	Residential	623.05	0.12	0.19
E-II.1	E-II	J St	South Yosemite Ave	Maag Ave	4812.72	0.91	1.46
E-II.2	E-II	Warnerville Rd	South Yosemite Ave	Ackley Clr	1913.57	0.36	0.58
E-II.3	E-II	Maag Ave	East F St	D St	1286.08	0.24	0.39
E-II.4	E-II	South Yosemite Ave	Greger St	J St	2935.00	0.56	0.89
E-II.5	E-II	South Yosemite Ave	Hi-Tech Pkwy	Greger St	1084.77	0.21	0.33
E-II.6	E-II	G St	Sixth Ave	Maag Ave	4115.49	0.78	1.25
E-II.7	E-II	South Yosemite Ave	Warnerville Rd	Hi-Tech Pkwy	1670.29	0.32	0.51
E-II.8	E-II	Maag Ave	G St	East F St	1084.37	0.21	0.33
E-II.9	E-II	Maag Ave	J St	G St	2113.95	0.40	0.64
E-II.10	E-II	Maag Ave	D St	Burchell Hill Dr	840.26	0.16	0.25
E-II.11	E-II	Sixth Ave	J St	G St	1435.55	0.27	0.44
E-II.12	E-II	Sixth Ave	D St	A St	1440.00	0.27	0.44
E-III.1	E-III	Poplar St	Oak Ave	First Ave	3590.24	0.68	1.09
E-III.2	E-III	D St	Sixth Ave	Maag Ave	4029.52	0.76	1.22
E-III.3	E-III	First Ave	E St	A St	1882.04	0.36	0.57
E-III.4	E-III	Walnut St	Oak Ave	First Ave	3085.85	0.58	0.94
E-III.5	E-III	A St	First AVe	North Yosemite Ave	824.87	0.16	0.25
E-III.6	E-III	A St	North Yosemite Ave	RR Tracks	172.77	0.03	0.05
E-III.7	E-III	Oak Ave	Walnut St	Poplar St	1335.96	0.25	0.40
E-III.8	E-III	Poplar St	Lee Ave	Oak Ave	1058.39	0.20	0.32

Proposed System

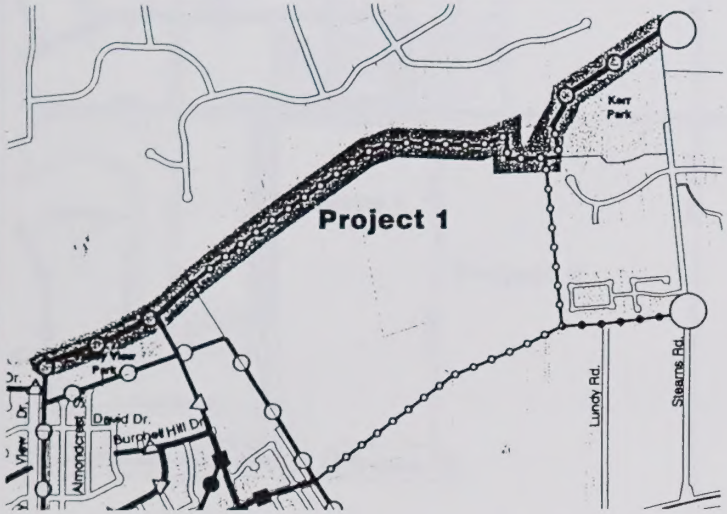
Segment Marker	Classification	Segment Name	From	To	Distance in Feet	Distance in Miles	Distance in Kilometers	Construction Cost Per Mile*	Total Cost
P-I.1	P-I	West F St	Crane Rd	Willowood Dr	3438.29	0.65	1.04	$ 500,000	$ 325,600
P-I.2	P-I	RT 120	A St	City Limits	1724.56	0.33	0.52	$ 500,000	$ 163,300
P-I.3	P-I	South City Limits	Crane Rd	Kaufman Rd	11509.23	2.18	3.49	$ 500,000	$ 1,089,900
P-I.4	P-I	Stanislaus River	City Limits	Kerr Park	4427.90	0.84	1.34	$ 1,000,000	$ 838,600
P-I.5	P-I	Kerr Park	West Kerr	East Kerr	1504.94	0.29	0.46	$ 1,000,000	$ 285,000
P-I.6	P-I	East of Oakdale	City Limits	Stearns Rd	4202.06	0.80	1.27	$ 500,000	$ 397,900
P-I.7	P-I	West F St	Willowood Dr	Willow Glen	791.46	0.15	0.24	$ 500,000	$ 75,000
P-I.8	P-I	West F St	City Limits	Crane Rd	606.52	0.11	0.18	$ 500,000	$ 57,400
P-I.9	P-I	Residential	Court	Hi-Tech Pkwy	326.11	0.06	0.10	$ 500,000	$ 30,900
P-I.10	P-I	Post Rd	City Limits	Sierra Rd	2104.25	0.40	0.64	$ 500,000	$ 199,300
P-I.11	P-I	East City Limits	E-I	D St	577.81	0.11	0.18	$ 500,000	$ 54,700
P-I.12	P-I	East City Limits	D St	Valley View Park	2227.12	0.42	0.67	$ 500,000	$ 210,900
P-I.13	P-I	Valley View Park	P-III	Valley View Dr	1486.67	0.28	0.45	$ 500,000	$ 140,800
P-I.14	P-I	East Valley View Park	P-I	Stanislaus River	545.12	0.10	0.17	$ 500,000	$ 51,600
P-I.15	P-I	Stanislaus River	Valley View Dr	City Limits	2232.71	0.42	0.68	$ 1,000,000	$ 422,900
P-I.16	P-I	Valley View Dr	Valley View Park	C St	1536.15	0.29	0.47	$ 500,000	$ 145,500
P-I.17	P-I	Crane Rd	City Limits	City Limits	1014.40	0.19	0.31	$ 500,000	$ 96,100
P-I.18	P-I	Crane Rd	City Limits	Tioga Ave	871.19	0.17	0.26	$ 500,000	$ 82,500
P-I.19	P-I	Crane Rd	Tioga Ave	City Limits	765.68	0.15	0.23	$ 500,000	$ 72,500
P-I.20	P-I	Crane Rd	City Limits	Bridle Ridge	347.28	0.07	0.11	$ 500,000	$ 32,900
P-I.21	P-I	Crane Rd	Bridle Ridge	City Limits	1459.81	0.28	0.44	$ 500,000	$ 138,200
P-I.22	P-I	Oak Valley Park	Ash Ave	Oak Ave	792.50	0.15	0.24	$ 500,000	$ 75,100
P-I.23	P-I	Sierra Rd	Maag Ave	City Limits	1082.00	0.20	0.33	$ 500,000	$ 102,500
P-I.24	P-I	Sierra Rd	East City Limits	West of Stearns Rd	5256.00	1.00	1.59	$ 500,000	$ 497,700
P-I.25	P-I	East of Oakdale	P-I	Kerr Park	1721.70	0.33	0.52	$ 500,000	$ 163,000
P-I.26	P-I	RR Tracks	Willowood Dr	BR Road 4	2349.30	0.44	0.71	$ 500,000	$ 222,500
P-I.27	P-I	Crane Rd	Route 108	City Limits	2167.00	0.41	0.66	$ 500,000	$ 205,200
P-I.28	P-I	Crane Rd	City Limits	Pontiac St	575.00	0.11	0.17	$ 500,000	$ 54,500
P-I.29	P-I	Crane Rd	Pontiac St	Stanislaus River	2191.00	0.41	0.66	$ 500,000	$ 207,500
P-I.30	P-I	Kerr Park	South Kerr Park	North Kerr Park	319.00	0.06	0.10	$ 1,000,000	$ 60,400
P-II.1	P-II	J St	Oak Valley Park	Gilbert Ave	2683.62	0.51	0.81	$ 5,000	$ 2,500
P-II.2	P-II	J St	First Ave	South Yosemite Ave	860.00	0.16	0.26	$ 5,000	$ 800
P-II.3	P-II	Court	Ackley Clr	P-I	448.88	0.09	0.14	$ 5,000	$ 400
P-II.4	P-II	Hi-Tech Pkwy	P-I	Post Rd	820.45	0.16	0.25	$ 5,000	$ 800
P-II.5	P-II	Hi-Tech Pkwy	South Yosemite Ave	P-I	1559.27	0.30	0.47	$ 5,000	$ 1,500
P-II.6	P-II	Maag Ave	Sierra Rd	J St	966.26	0.18	0.29	$ 5,000	$ 900
P-II.7	P-II	First Ave	J St	G St	1920.00	0.36	0.58	$ 5,000	$ 1,800
P-II.8	P-II	First Ave	A St	North St	470.00	0.09	0.14	$ 5,000	$ 400
P-II.9	P-II	First Ave	F St	E St	480.00	0.09	0.15	$ 5,000	$ 500
P-II.10	P-II	Bridle Ridge	Crane Rd	Willowood Dr	4612.67	0.87	1.40	$ 5,000	$ 4,400
P-II.11	P-II	Warnerville Rd	South Yosemite Ave	Ackley Clr	1914.92	0.36	0.58	$ 5,000	$ 1,800
P-II.12	P-II	Ackley Cir	Warnerville Rd	Warnerville Rd	2478.96	0.47	0.75	$ 5,000	$ 2,300
P-II.13	P-II	Post Rd	Hi-Tech Pkwy	City Limits	1575.26	0.30	0.48	$ 5,000	$ 1,500
P-II.14	P-II	Siera Rd	Post Rd	Maag Ave	1412.39	0.27	0.43	$ 5,000	$ 1,300
P-II.15	P-II	Sixth Ave	G St	East F St	484.45	0.09	0.15	$ 5,000	$ 500
P-II.16	P-II	Sixth Ave	East F St	D St	960.00	0.18	0.29	$ 5,000	$ 900
P-II.17	P-II	A St	Old Stockton Rd	Sixth Ave	649.31	0.12	0.20	$ 5,000	$ 600
P-II.18	P-II	A St	RR Tracks	Old Stockton Rd	344.13	0.07	0.10	$ 5,000	$ 300
P-II.19	P-II	First Ave	Walnut St	A St	907.00	0.17	0.27	$ 5,000	$ 900
P-II.20	P-II	First Ave	Poplar St	Walnut St	1028.15	0.19	0.31	$ 5,000	$ 1,000
P-II.21	P-II	A St	First Ave	North Yosemite Ave	790.93	0.15	0.24	$ 5,000	$ 700
P-II.22	P-II	A St	North Yosemite Ave	RR Tracks	175.64	0.03	0.05	$ 5,000	$ 200
P-II.23	P-II	Willowood Dr	West F St	J St	536.67	0.10	0.16	$ 5,000	$ 500
P-II.24	P-II	Willowood Dr	J St	Bridle Ridge	1266.46	0.24	0.38	$ 5,000	$ 1,200
P-II.25	P-II	Willowood Dr	Bridle Ridge	City Limits	1097.98	0.21	0.33	$ 5,000	$ 1,000
P-II.26	P-II	Bridle Ridge	Willowood Dr	Kaufman Rd	5853.71	1.11	1.77	$ 5,000	$ 5,500
P-II.27	P-II	Gregor St	Kaufman Rd	RR Tracks	1418.90	0.27	0.43	$ 5,000	$ 1,300
P-II.28	P-II	Gregor St	RR Tracks	South Yosemite Ave	1255.46	0.24	0.38	$ 5,000	$ 1,200
P-II.29	P-II	J St	Crane Rd	Willowood Dr	3662.35	0.69	1.11	$ 5,000	$ 3,500
P-II.30	P-II	J St	Willowood Dr	Oak Valley Park	2204.66	0.42	0.67	$ 5,000	$ 2,100
P-II.31	P-II	BR Road 1	Bridle Ridge	City Limits	761.00	0.14	0.23	$ 5,000	$ 700
P-II.32	P-II	BR Road 2	Bridle Ridge	City Limits	820.10	0.16	0.25	$ 5,000	$ 800
P-II.33	P-II	BR Road 3	Bridle Ridge	RR Tracks	631.60	0.12	0.19	$ 5,000	$ 600
P-II.34	P-II	BR Road 4	RR Tracks	City Limits	1171.60	0.22	0.36	$ 5,000	$ 1,100
P-II.35	P-II	BR Road 5	Bridle Ridge	City Limits	1364.50	0.26	0.41	$ 5,000	$ 1,300
P-II.36	P-II	Ventanas Ave	J St	G St	1359.00	0.26	0.41	$ 5,000	$ 1,300
P-III.1	P-III	J St	Gilbert Ave	Davitt Ave	862.50	0.16	0.26	$ 1,000	$ 200
P-III.2	P-III	Davitt Ave	J St	J St	256.00	0.05	0.08	$ 1,000	$ 50
P-III.3	P-III	Willowood Dr	West F St	Pontiac St	1877.88	0.36	0.57	$ 1,000	$ 400
P-III.4	P-III	River Ave	North St	Walnut St	4164.64	0.79	1.26	$ 1,000	$ 800
P-III.5	P-III	Pontiac St	City Limits	Willow Glen	3998.13	0.76	1.21	$ 1,000	$ 800
P-III.6	P-III	Old Stockton Rd	A St	River Bluff Dr	1691.39	0.32	0.51	$ 1,000	$ 300
P-III.7	P-III	H St	Oak Ave	Wood Ave	630.00	0.12	0.19	$ 1,000	$ 100
P-III.8	P-III	J St	Davitt Ave	First Ave	654.00	0.12	0.20	$ 1,000	$ 100
P-III.9	P-III	East F St	Sixth Ave	Maag Ave	3896.44	0.74	1.18	$ 1,000	$ 700
P-III.10	P-III	G St	Wood Ave	First Ave	3411.19	0.65	1.03	$ 1,000	$ 600
P-III.11	P-III	G St	First Ave	South Yosemite Ave	825.00	0.16	0.25	$ 1,000	$ 200
P-III.12	P-III	G St	South Yosemite Ave	Sixth Ave	1175.01	0.22	0.36	$ 1,000	$ 200
P-III.13	P-III	Maag Ave Extension	Burchell Hill Dr	Valley View Park	872.07	0.17	0.26	$ 1,000	$ 200
P-III.14	P-III	D St	Maag Ave	City Limits	896.39	0.17	0.27	$ 1,000	$ 200
P-III.15	P-III	East F St	Maag Ave	City Limits	1093.80	0.21	0.33	$ 1,000	$ 200
P-III.16	P-III	A St	Sixth Ave	Valley View Dr	2370.94	0.45	0.72	$ 1,000	$ 400
P-III.17	P-III	C St	Valley View Dr	Burchell Hill Dr	1756.32	0.33	0.53	$ 1,000	$ 300
P-III.18	P-III	Burchell Hill Dr	David Dr	C St	480.57	0.09	0.15	$ 1,000	$ 100
P-III.19	P-III	Burchell Hill Dr	C St	Maag Ave	527.83	0.10	0.16	$ 1,000	$ 100
P-III.20	P-III	River Bluff Dr	Old Stockton Rd	Valley View Dr	2877.21	0.54	0.87	$ 1,000	$ 500
P-III.21	P-III	North St	First Ave	River Ave	211.43	0.04	0.06	$ 1,000	$ 40
P-III.22	P-III	Oake Ave	Polar St	West F St	1879.00	0.36	0.57	$ 1,000	$ 400
P-III.23	P-III	Oak Ave	West F St	H St	743.49	0.14	0.23	$ 1,000	$ 100
P-III.24	P-III	Wood Ave	H St	G St	380.00	0.07	0.12	$ 1,000	$ 100
P-III.25	P-III	Wood Ave	J St	H St	521.00	0.10	0.16	$ 1,000	$ 100
P-III.26	P-III	Lee Ave	Pontiac St	Poplar St	1263.49	0.24	0.38	$ 1,000	$ 200
P-III.27	P-III	Pontiac St	Willow Glen	Lee Ave	681.25	0.13	0.21	$ 1,000	$ 100
P-III.28	P-III	Walnut St	Oak Ave	City Limits	686.00	0.13	0.21	$ 1,000	$ 100
P-III.29	P-III	Poplar St	Lee Ave	City Limits	475.00	0.09	0.14	$ 1,000	$ 100
								Total**	$ 6,555,690

* Bikeway segment construction cost estimates based on topographic information provided by the City of Oakdale and field surveys conducted by Fehr & Peers Associates. Average construction cost per mile factors are summarized in attached Table 1.

** Total Cost of Proposed System is preliminary and based upon minimum required improvements. Further review of required improvements may adjust this value.

Existing System	E-I	E-II	E-III	Total
Feet	3,168	24,732	15,980	43,880
Miles	0.60	4.68	3.03	8.31
Kilometers	0.96	7.49	4.84	13.30

Proposed System	P-I	P-II	P-III	Total
Feet	60,153	50,946	41,158	152,257
Miles	11.39	9.65	7.80	28.84
Kilometers	18.23	15.44	12.47	46.14



LEGEND

- Class I Bicycle Path (Existing)
- Class I Bicycle Path (Proposed)
- Class II Bicycle Lane (Existing)
- Class II Bicycle Lane (Proposed)
- Class III Bicycle Route (Existing)
- Class III Bicycle Route (Proposed)
- Class I Bicycle Path (Outside of City Limits)

N

1" = 2000'

NOTES:

(1) The City of Oakdale makes no claims as to the safety of any of the facilities shown on this map. The purpose of this map is to identify potential bikeway facilities for funding and implementation. For more information please contact the City of Oakdale at (209) 847-4245.

(2) The final designation of bikeways on this map may change when detailed technical analysis is developed for individual projects as they advance to implementation.

SEGMENT	CLASS	LENGTH (km)/mi.	ESTIMATED COST	DESCRIPTION
1	I	(2.61)/1.61	$1,610,000	New Class I Bike Path connecting City Limits to Kerr Park along Stanislaus River. This project will provide a recreational link from the City of Oakdale to Kerr Park.

FEHR & PEERS ASSOCIATES, INC.
Transportation Consultants
WWW.FEHRANDPEERS.COM

Sep 25, 2001 sjr
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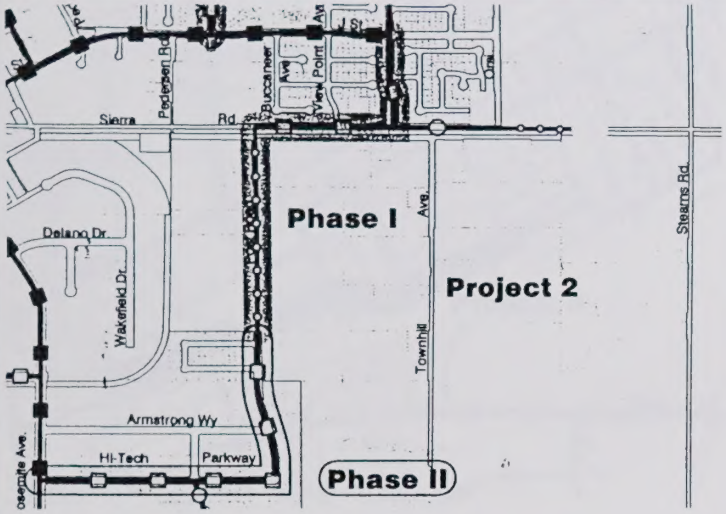
City of Oakdale
PROJECT 1

FIGURE D-1



LEGEND

- Class I Bicycle Path (Existing)
- Class I Bicycle Path (Proposed)
- Class II Bicycle Lane (Existing)
- Class II Bicycle Lane (Proposed)
- Class III Bicycle Route (Existing)
- Class III Bicycle Route (Proposed)
- Class I Bicycle Path (Outside of City Limits)

N

1" = 2000'

NOTES:

(1) The City of Oakdale makes no claims as to the safety of any of the facilities shown on this map. The purpose of this map is to identify potential bikeway facilities for funding and implementation. For more information please contact the City of Oakdale at (209) 847-4245.

(2) The final designation of bikeways on this map may change when detailed technical analysis is developed for individual projects as they advance to implementation.

SEGMENT	CLASS	LENGTH (km)/mi.	ESTIMATED COST	DESCRIPTION
Phase I	I/II	(1.38)/.85	$202,250	New Class I Bike Path connecting from the industrial area of Oakdale to the residential area north of Sierra Rd. This project will provide a safe alternative route for bicycle/pedestrian commuters not wanting to use South Yosemite Ave.
Phase II	II	(1.20)/.75	$3,750	Class II route along Post Rd. connecting to Class I in industrial area extending along Hi-Tech Parkway and terminating at Yosemite Ave. Completes facility from Sierra Rd. to South Yosemite Ave.

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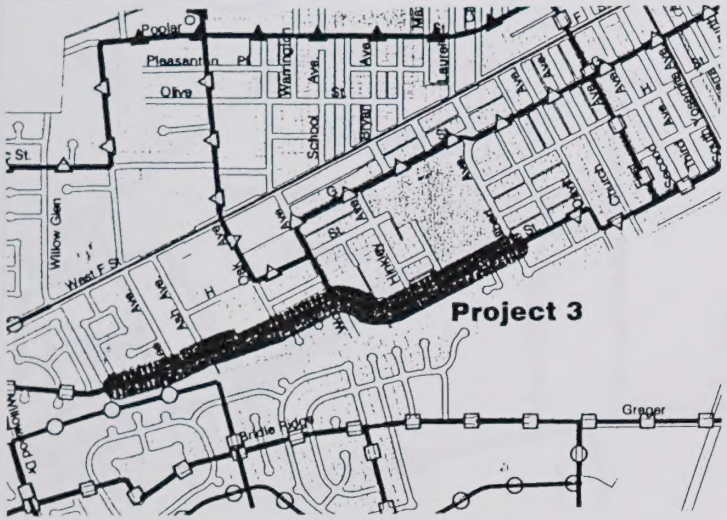
City of Oakdale
PROJECT 2

FIGURE D-2



LEGEND

- Class I Bicycle Path (Existing)
- Class I Bicycle Path (Proposed)
- Class II Bicycle Lane (Existing)
- Class II Bicycle Lane (Proposed)
- Class III Bicycle Route (Existing)
- Class III Bicycle Route (Proposed)
- Class I Bicycle Path (Outside of City Limits)

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SEGMENT	CLASS	LENGTH (km)/mi.	ESTIMATED COST	DESCRIPTION
1	II	(.33)/.21	$1,050	New Class II Bike Lane on J Street connecting the Bridal Ridge development to Oak Valley Park. This project is one component of three segments providing a major east/west bicycle facility.
2	I	(.24)/.15	$75,000	New Class I Bike Path connecting Ash Avenue to Oak Avenue through Oak Valley Park.
3	II	(.81)/.51	$2,550	New Class II Bike Lane on J Street from Oak Valley Park to Gilbert Avenue. This project will provide a link to Oakdale High School.

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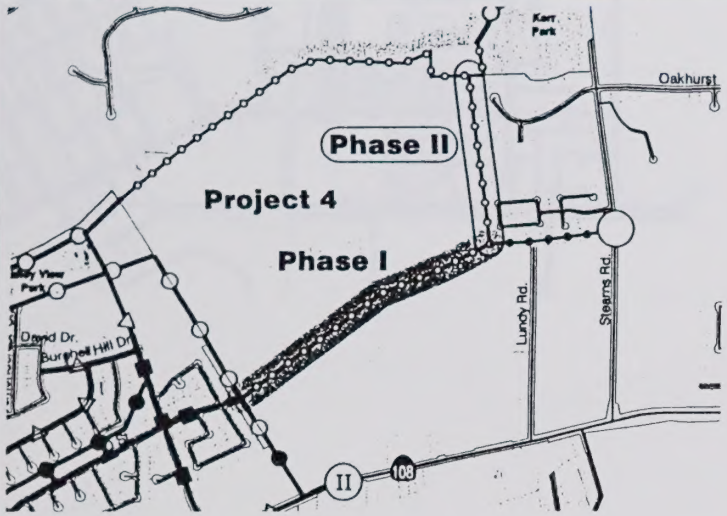
City of Oakdale
PROJECT 3

FIGURE D-3



LEGEND

- Class I Bicycle Path (Existing)
- Class I Bicycle Path (Proposed)
- Class II Bicycle Lane (Existing)
- Class II Bicycle Lane (Proposed)
- Class III Bicycle Route (Existing)
- Class III Bicycle Route (Proposed)
- Class I Bicycle Path (Outside of City Limits)

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SEGMENT	CLASS	LENGTH (km)/mi.	ESTIMATED COST	DESCRIPTION
Phase I	I	(.91)/.57	$285,000	New Class I Bike Path extending from D Street at the City limits connecting to the proposed Class I Bike Path identified in Project 5 behind the Belsera development. This project will provide a recreational/commuter link to areas east of the City.
Phase II	I	(.52)/.32	$160,000	New Class I connecting Belsera Development to Oakdale East City Limits. Provides continuous link from D St. to Kerr Park.

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City of Oakdale
PROJECT 4

FIGURE D-4

- Class I Bicycle Path (Existing)
- Class I Bicycle Path (Proposed)
- Class II Bicycle Lane (Existing)
- Class II Bicycle Lane (Proposed)
- Class III Bicycle Route (Existing)
- Class III Bicycle Route (Proposed)
- Class I Bicycle Path (Outside of City Limits)

N

1" = 2000'

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SEGMENT	CLASS	LENGTH (km)/mi.	ESTIMATED COST	DESCRIPTION
1	II	(.41)/.25	$1,250	New Class II Bike Lane connecting G Street to J Street. This project will provide a loop around the Junior High School and Cottle Woods Park.

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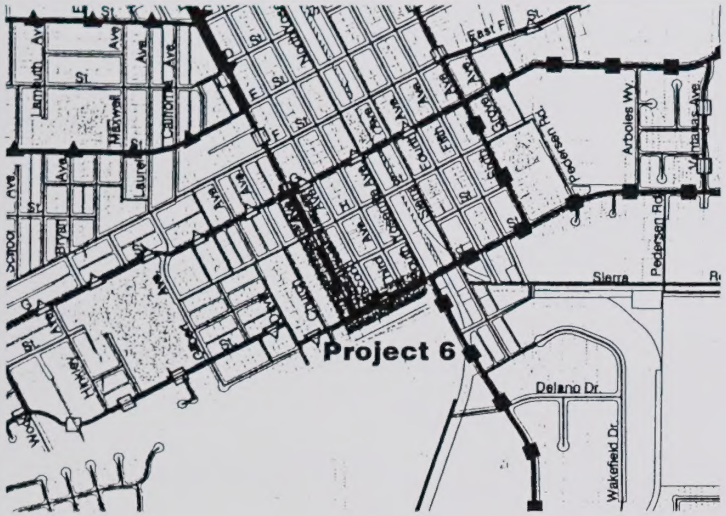
City of Oakdale
PROJECT 5
FIGURE D-5



LEGEND

- Class I Bicycle Path (Existing)
- Class I Bicycle Path (Proposed)
- Class II Bicycle Lane (Existing)
- Class II Bicycle Lane (Proposed)
- Class III Bicycle Route (Existing)
- Class III Bicycle Route (Proposed)
- Class I Bicycle Path (Outside of City Limits)

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SEGMENT	CLASS	LENGTH (km)/mi.	ESTIMATED COST	DESCRIPTION
1	II	(.84)/.52	$2,600	New Class II lane route between G St. and J St. providing continuous connection to South Yosemtie Ave. and southern portion of city.

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City of Oakdale
PROJECT 6

FIGURE D-6

Appendix E

Bicycle Funding Sources

Bicycle Funding Sources Applicable to the City of Oakdale

Source	Funding Type	Amount	Match	Due Date	Contact	Project Type
Surface Transportation Program (STP)	Federal	$535 million Nationwide	20%	Pending	STANCOG	General
Transportation Enhancement Program (TE)	Federal	$630 million, Nationwide	12%	Pending	Caltrans	General
Scenic Byways Program Fund	Federal	$10 million Nationwide	20%	Notice – February	Caltrans	State Routes
Bridge Repair and Replacement Program (HBRR)	Federal	$260 million Nationwide	None	October selection	Caltrans	Bridges
National Recreational Trails Fund	Federal	$3,000 to Statewide	State provides	October 1	State Dept of Parks/Rec	Multi-Use Trails
Local Transportation Fund (LTF)	State	$40,000 Countywide	None	January	STANCOG	General
California Bikeway Transportation Act (BTA)	State	$5 million Statewide beginning 2004	10%	December 1	Caltrans	General
Environmental Enhancement and Mitigation Program (EEM)	State	$500,000 per project	None	November	State of California Resources Agency	Multi-Use Trails
Flexible Congestion Relief (FCR)	State	$300 million annually	None	December 1 of odd years	STANCOG	Commuter Routes
Congestion Mitigation and Air Quality (CMAQ)	Federal	$8.1 billion Nationwide	20%	Multi-selection Process	STANCOG	Commuter Routes

APPENDIX F

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2. *Highway and Facility Design: Scenic Byways,* Transportation Research Record 1363, Transportation Research Board, Washington, D.C., 1992.

3. Wilkinson, W.C., and Moran, C.G., *Selecting and Designating Bicycle Routes,* Bicycle Federation of America, Washington, D.C., April, 1986.

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5. *Selecting Roadway Design Treatments to Accommodate Bicycles,* Publication No. FHWA-RD-92-073, U.S. Department of Transportation, Federal Highway Administration, January 1994.

7. *"Rack 'Em Up,"* Bicycle Improvement Program, Seattle Engineering Department, July, 1993.

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9. *The National Bicycling and Walking Study: Transportation Choices for a Changing America,* Publication No. FHWA-PD-94-023, U.S. Department of Transportation, Federal Highway Administration. 1994.

10. *Chapter 1000: Bikeway Planning and Design*, Highway Design Manual, California Department of Transportation, 2001.

11. *1990 Census Transportation Planning Package*, Bureau of Transportation Statistics, U.S. Department of Transportation.

2003 0467

RESOLUTION NO. 2001-133

A RESOLUTON OF THE OAKDALE CITY COUNCIL ADOPTING
A CITYWIDE BICYCLE AND PEDESTRIAN MASTER PLAN

THE CITY OF OAKDALE CITY COUNCIL DOES HEREBY RESOLVE THAT:

WHEREAS, the City of Oakdale, in conjunction wit the Oakdale Trails Advisory Committee, has prepared a Bicycle and Pedestrian Master Plan, which includes a system of existing and planned bicycle routes and pedestrian trails for the City of Oakdale; and

WHEREAS, the Bicycle and Pedestrian Master Plan incorporates 11 established state guidelines to maximize the potential for obtaining subsequent grants for capital improvements, and for future plan implementation; and

WHEREAS, the preparation and subsequent adoption of a Bicycle and Pedestrians Master Plan is appropriate and consistent wit the intent of the 2015 General Plan; and

WHEREAS, the City Council finds and determines that the project qualifies for a determination as being exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15162(a) and 15168(c)(2); and

WHEREAS, the Planning Commission, on September 18, 2001, held a Public Hearing on the Bicycle and Pedestrian Master Plan, and following the hearing unanimously recommended that the City Council adopt said Plan; and

WHEREAS, the Bicycle and Pedestrian Master Plan was reviewed by the City Council in a duly noticed Public Hearing held on October 1, 2002; and

WHEREAS, following the Public Hearing, the City Council voted unanimously to adopt the City of Oakdale Bicycle and Pedestrians Plan.

NOW, THEREFORE, BE IT RESOLVED by the City Council, that the City of Oakdale Bicycle and Pedestrian Master Plan is hereby adopted.

PASSED AND ADOPTED this 1st day of October 2001, by the following vote:

AYES:	COUNCILMEMBERS:	Deklinski, Jackson, Kuhn, Rockey, Skavdahl
NOES:	COUNCILMEMBERS:	None
ABSENT:	COUNCILMEMBERS:	None

Pat Kuhn

Pat Kuhn, Mayor

ATTEST:

Rebecca A. Peluso

Rebecca A. Peluso
Certified Municipal Clerk

CERTIFICATION

THE FOREGOING IS A TRUE AND CORRECT COPY OF Res 2001-133, DULY AND REGULARLY ADOPTED BY THE CITY COUNCIL OF THE CITY OF OAKDALE IN Regular SESSION.

REBECCA A. PELUSO, City Clerk
CITY OF OAKDALE, CA

Rebecca A. Peluso
City Clerk

Date: JUN. 28 2002

Bush, Ackley, Milich & Hallinan
Attorneys at Law
366 West "F" Street
Oakdale, CA 95361

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StanCOG

Stanislaus Council of Governments

City of Ceres • City of Hughson • City of Modesto • City of Newman • City of Oakdale • City of Patterson
City of Riverbank • City of Turlock • City of Waterford • County of Stanislaus

May 9, 2002

Mr. David Priebe
Bicycle Facilities Unit
California Department of Transportation
PO Box 942873
Sacramento, CA 94273-0001

RE: Conformity of the City of Oakdale's Bicycle Plan to the StanCOG 2001 Regional Transportation Plan and Section 891.2 of the Streets and Highways Code

Dear Mr. Priebe:

The Stanislaus Council of Governments has reviewed the City of Oakdale's Bicycle Plan for consistency with the StanCOG Regional Bicycle Action Plan, 2001 Regional Transportation Plan, and Section 891.2 of the Streets and Highways Code.

As an integral part of providing consistent planning and coordination among the modes of travel, great care was taken to evaluate Oakdale's Bicycle Plan to ensure that not only the needs of the City of Oakdale were addressed but also that the plan played a role in the development of bicycle travel throughout the County.

Therefore, it is the opinion of StanCOG that the City of Oakdale's Bicycle Plan conforms to the 2001 Regional Transportation Plan, the Regional Bicycle Action Plan, and Section 891.2 of the Streets and Highways Code.

Should you have any questions or concerns, please feel free to contact Tiffani Fink at 209-558-7830.

Sincerely,

Gary Dickson
Executive Director

900 H Street, Suite D • Modesto, CA 95354 • 209.558.7830 • Fax 209.558.7833